

CITY OF TORRANCE
CONSTRUCTION PLANS
FOR
TORRANCE CENTENNIAL PLAZA, FEAP-739

GENERAL NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND DEPTH OF ALL CONNECTION POINTS AND UTILITY CROSSINGS PRIOR TO BEGINNING ACTUAL CONSTRUCTION.
2. THE CONTRACTOR SHALL INSPECT THE SITE AND PORTIONS THEREOF FOR EXISTING FIELD CONDITIONS THAT WILL AFFECT THE WORK PRIOR TO BEGINNING ANY WORK.
3. THE CONTRACTOR SHALL COMPARE HIS/HER OBSERVATIONS WITH THE PLANS AND SATISFY HIM/HERSELF TO THE EXISTING CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED.
4. THE CONTRACTOR SHALL REPORT TO THE AGENCY(IES) OF CONFLICTS OR OMISSIONS, ETC, BEFORE PROCEEDING WITH ANY WORK.
5. THE CONTRACTOR SHALL COORDINATE A SCHEDULE FOR TEMPORARY SHUTDOWN OF THE EXISTING IRRIGATION SYSTEM WITH OWNER, OWNER'S AUTHORIZED REPRESENTATIVE, AND/OR AGENCY(IES).
6. TO PERFORM CONSTRUCTION WORK, THE OWNER, OWNER'S AUTHORIZED REPRESENTATIVE, AND/OR AGENCY(IES) WILL BE THE ONLY PARTY TO OPERATE THE VALVES TO ACCOMPLISH THE SHUTDOWN.
7. THE WALL AND FACE OF ALL EXCAVATIONS GREATER THAN (5) FEET IN DEPTH SHALL BE EFFECTIVELY GUARDED BY A SHORING SYSTEM; SLOPING OF THE GROUND OR OTHER EQUIVALENT MEANS, TRENCHES, OR EXCAVATIONS LESS THAN (5) FEET IN DEPTH SHALL ALSO BE GUARDED WHEN EXAMINATION INDICATES THAT HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED.
8. THE CONTRACTOR SHALL OBTAIN A PERMIT TO PERFORM EXCAVATION OR TRENCH WORK AS DESCRIBED IN NO.7 ABOVE FROM CAL-OSHA AND ALL APPLICABLE AGENCIES.
9. ALL CONCRETE SHALL BE 560-C-3250 (GREENBOOK) UNLESS OTHERWISE SPECIFIED.
10. THE CONTRACTOR SHALL MAINTAIN THE WORK AREA IN A NEAT, SAFE, CLEAN, AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE OWNER, OWNER'S AUTHORIZED REPRESENTATIVE, AND/OR AGENCY(IES). THE WORK SITE AND ITS AFFECTED AREAS SHALL BE KEPT CLEAN OF DEBRIS, WITH DUST AND NUISANCE BEING CONTROLLED AT ALL TIMES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ANY CLEAN-UP ON ADJACENT STREETS AND PARKING LOTS AFFECTED BY THE WORK.
11. THE CONTRACTOR SHALL KEEP A SIGNED SET OF APPROVED PLANS AND SPECIFICATIONS AND A COPY OF ALL CONSTRUCTION PERMITS ON THE JOB SITE AT ALL TIMES DURING WORKING OPERATIONS.
12. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND SAFETY REQUIREMENTS. ALL WORK SHALL COMPLY WITH CONDITIONS ESTABLISHED BY THE REGIONAL WATER QUALITY CONTROL BOARD AND THE CITY.
13. ALL EXISTING IRRIGATION SYSTEMS SHALL REMAIN OPERATIONAL. DAMAGE TO ANY EXISTING IRRIGATION SYSTEM CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR(S) WITHIN THE SAME WORKDAY AT NO ADDITIONAL COST TO THE OWNER.
14. ALL CONCRETE SIDEWALKS OR CURBS TO BE REPLACED SHALL BE SAWCUT TO THE NEAREST TRANSVERSE SCORE MARK OR ADJUSTABLE CONTROL JOINT OR WEAKENED PLANE JOINT AND REPLACED IN CONFORMANCE WITH THE APPLICABLE CITY OF TORRANCE CODES AND STANDARDS AND TO THE OWNER'S AND/OR OWNER'S AUTHORIZED REPRESENTATIVE SATISFACTION. ALL EXPOSED CONCRETE SURFACES SHALL CONFORM IN GRADE, COLOR AND FINISH TO ALL ADJOINING CURBS AND WALKS.
15. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES WHICH ARE TO REMAIN.

16. LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS WERE OBTAINED FROM AVAILABLE RECORDS. NEITHER THE OWNER NOR LANDSCAPE ARCHITECT ASSUMES ANY RESPONSIBILITY FOR UTILITIES NOT SHOWN OR NOT IN THE LOCATION SHOWN. THE CONTRACTOR(S) SHALL VERIFY ALL LOCATIONS AND ELEVATIONS AND SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT UTILITY LINES WHETHER SHOWN OR NOT SHOWN.
17. THE CONTRACTOR SHALL OBTAIN THE CITY'S APPROVAL OF WORK PRIOR TO BACKFILLING EXCAVATION AND/OR OPEN TRENCHES. ANY AREAS BACKFILLED WITHOUT PRIOR APPROVAL WILL BE REQUIRED TO BE EXPOSED AND CORRECTED AS NECESSARY BY THE CONTRACTOR AT NO COST TO OWNER.
18. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE FROM DAMAGE. ALL IMPROVEMENTS DAMAGED BY THE CONTRACTOR'S WORK SHALL BE EXPEDITIOUSLY REPAIRED OR RECONSTRUCTED AT THE CONTRACTOR(S)'S EXPENSE WITHOUT ADDITIONAL COMPENSATION.
19. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 36 INCHES COVER ON ALL PIPELINES UNLESS OTHERWISE SHOWN OR DIRECTED.
20. THE CONTRACTOR SHALL ADJUST ALL VALVE BOXES, PULL BOXES AND MANHOLES TO FINISHED GRADE UNLESS OTHERWISE SHOWN OR SPECIFIED.
21. THE CONTRACTOR SHALL PROPERLY DISPOSE OF ALL DEBRIS FROM DEMOLITION AT CONTRACTOR(S)'S EXPENSE.
22. THE CONTRACTOR(S) SHALL DISPOSE OF ALL WASTES AT AN APPROVED LANDFILL OR OTHER SUITABLE DISPOSAL SITES AT THE CONTRACTOR'S EXPENSE.
23. A DIG ALERT IDENTIFICATION NUMBER MUST BE ISSUED BEFORE A PERMIT TO EXCAVATE WILL BE VALID. FOR THE DIG ALERT ID NUMBER, THE CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT AT 1-800-422-4133 AT LEAST 48 HOURS BEFORE ANY EXCAVATION IN THE VICINITY OF ANY EXISTING UNDERGROUND FACILITIES.
24. THE CONTRACTOR SHALL RESTORE ALL SURVEY MONUMENTS THAT ARE DAMAGED OR DESTROYED DURING CONSTRUCTION.
25. ALL VEGETATION, SHRUBS, LANDSCAPING FEATURES DAMAGED, REMOVED, OR OTHERWISE IMPACTED BY THE WORK SHALL BE REPLACED IN KIND. ALL EXISTING TREES SHALL BE PROTECTED IN PLACE OR BE TEMPORARILY REMOVED AND REPLACED PER THE OWNER'S AND/OR THE OWNER'S AUTHORIZED REPRESENTATIVE'S APPROVAL.



SHEET INDEX

TITLE SHEET
HARDSCAPE PLAN
HARDSCAPE DETAILS
PLANTING & LIGHTING PLAN
PLANTING DETAILS
IRRIGATION PLAN
IRRIGATION DETAILS
PARTIAL TOPOGRAPHIC SURVEY
GRADING PLAN
EROSION CONTROL PLAN
STREET LIGHT PLAN

1
2
3
4
5
6
7
8
9
10
11

ABBREVIATIONS

BV BALL VALVE
CL CENTERLINE
EX EXISTING
FG FINISH GRADE
FS FINISH SURFACE
GAL GALLON
GC GROUND COVER
GV GATE VALVE
NTS NOT TO SCALE
OC ON CENTER
PL PROPERTY LINE
POC POINT OF CONNECTION
QC QUICK COUPLER
RCV REMOTE CONTROL VALVE
TYP TYPICAL



REVISIONS				
REV	DATE	BY	CHECKED	DESCRIPTION

RECOMMENDED BY:
Beth Overstreet 4/13/12
BETH OVERSTREET
PROJECT MANAGER
R.C.E. NO. 63944 (EXP. 09/30/2012)

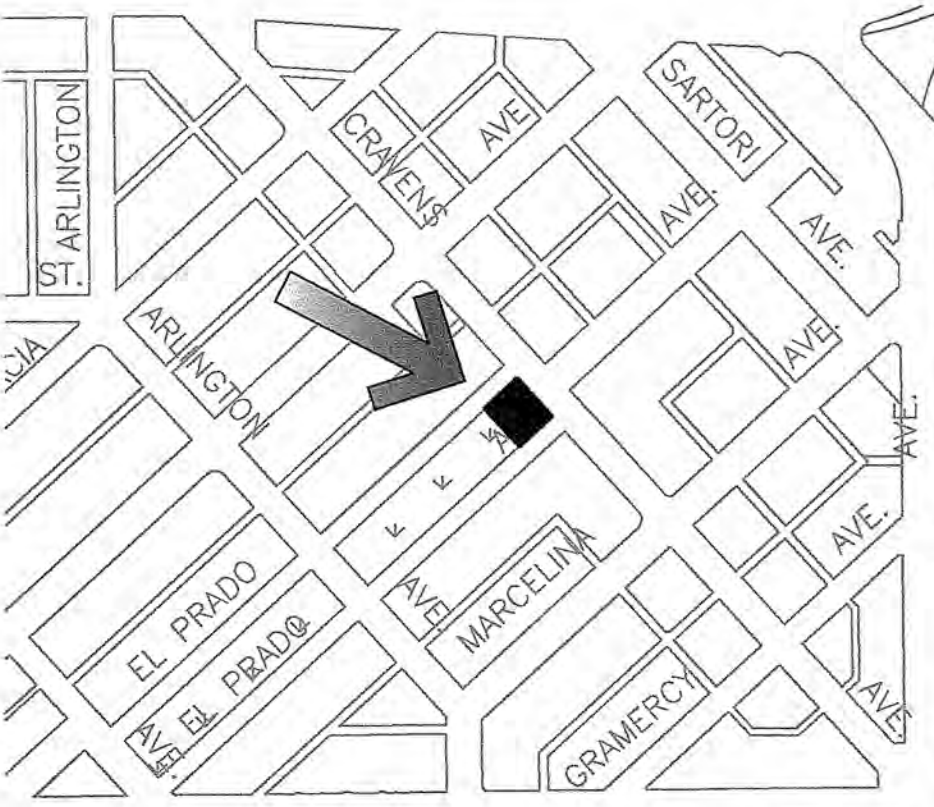
DRAWN BY: STEPHANIE HARRIS
DESIGNED BY: ARTHUR ALANIZ
Arthur Alaniz 4/13/12
PROJECT ENGINEER:
LEA REIS, ASSOCIATE ENGINEER DATE

APPROVED BY:
Toufic Jamil Semaan 4/13/12
TOUFIC JAMIL SEMAAN
ACTING CITY ENGINEER
R.C.E. NO. 59226 (EXP. 06/30/2013)

SCALE: AS SHOWN
SHEET 1 OF 11
PLAN NO.
LS-71



PROJECT LOCATION MAP
NTS



VICINITY MAP
NTS

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT
TORRANCE CENTENNIAL PLAZA, FEAP-739
TITLE SHEET

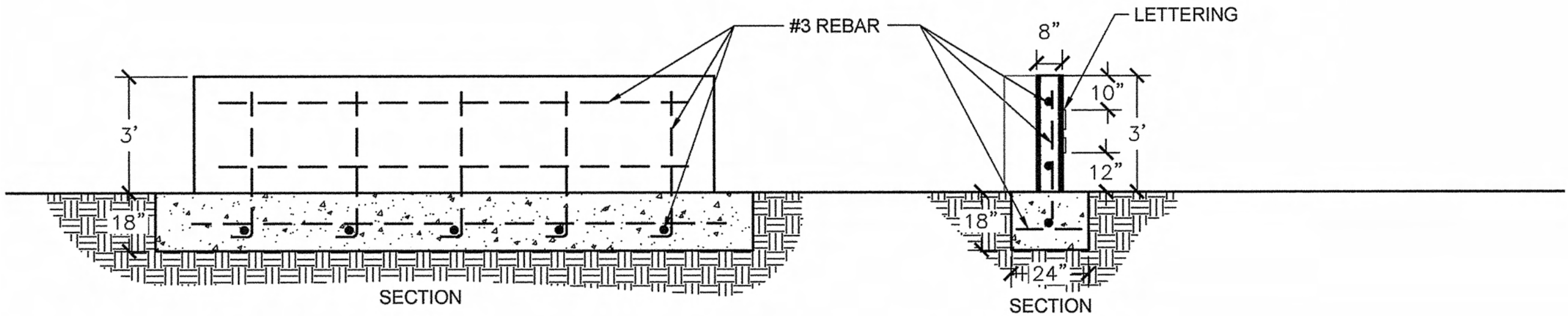
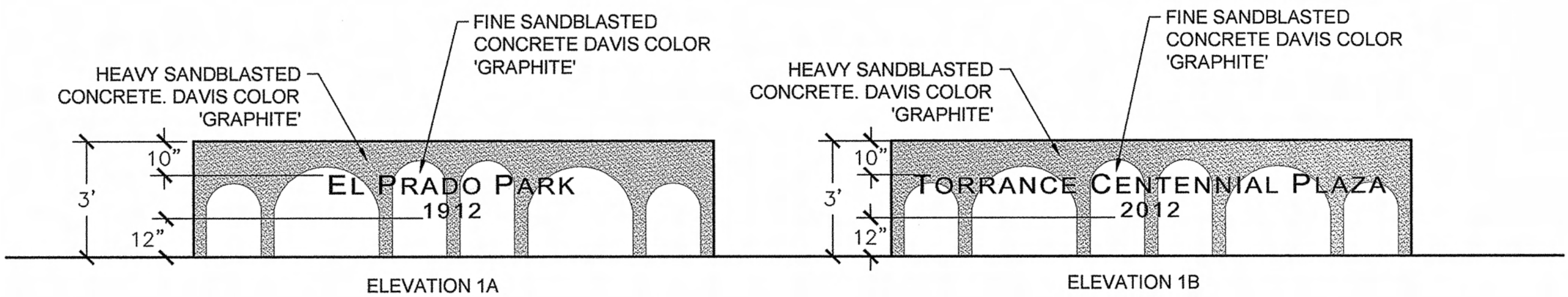
BENCHMARK:
ELEVATIONS AS SHOWN HEREON ARE IN TERMS OF THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) BASED LOCALLY UPON THE FOLLOWING COUNTY OF LOS ANGELES BENCHMARK(S):
NAME: NGVD29 ELEV. (FT)
CY 9522 118.84
CY 8324 118.02

BASIS OF COORDINATES:
BEARINGS AND COORDINATES AS SHOWN HEREON ARE IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM OF 1983 (EPOCH 2000.35), ZONE 5; BASED LOCALLY UPON THE FOLLOWING STATE OF CALIFORNIA CORRS STATIONS:
NAME LATITUDE LONGITUDE
CRHS 33-49-24.59403 118-16-21.90043
CRHS 33-49-24.59403 118-16-21.90043

PLANS PREPARED BY:
FEED GROUP
landscape architecture
8000 border street
torrance, ca 90504
T 313/88055 F 313/88029

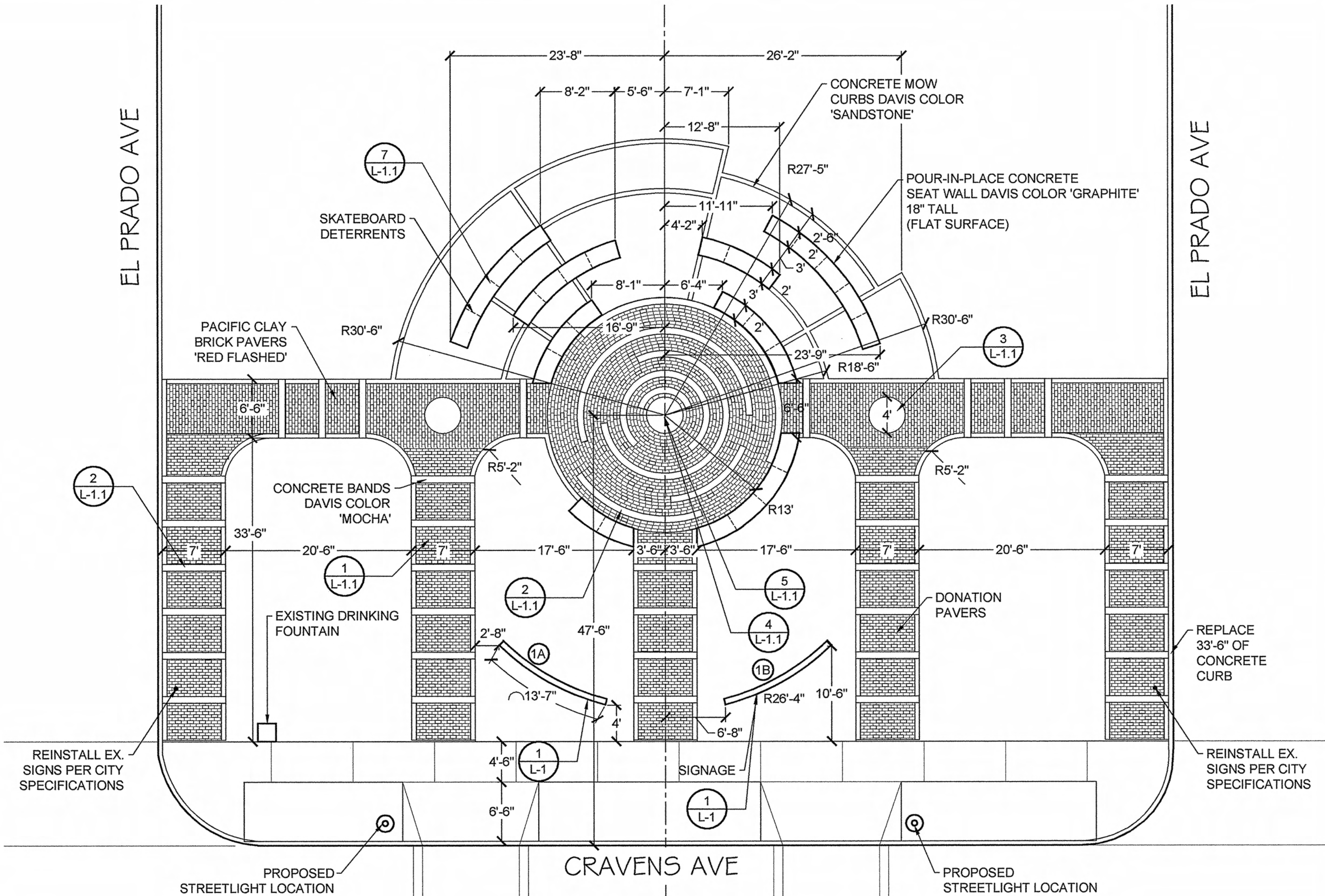
CONSTRUCTION PLAN NOTES:

1. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT FOR THE INSTALLATION OF ALL IMPROVEMENTS AS SHOWN ON THE DRAWINGS AND AS DESCRIBED IN THE SPECIFICATIONS.
2. CONTRACTOR SHALL REVIEW ALL EXISTING SITE CONDITIONS PRIOR TO SUBMITTING BID AND PRIOR TO COMMENCING INSTALLATION. IF ANY DISCREPANCIES EXIST, THEY SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CITY OR THE CITY'S AUTHORIZED REPRESENTATIVE.
3. DEVIATIONS BETWEEN THE DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CITY OR THE CITY'S AUTHORIZED REPRESENTATIVE.
4. COSTS INCURRED DUE TO REPAIR, RESTORATION, OR REPLACEMENT OF EXISTING IMPROVEMENTS WHICH ARE DESIGNATED "TO BE PROTECTED" OR "TO REMAIN" WHICH ARE DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
5. UNLESS DESIGNATED ON THE DRAWINGS OTHERWISE, ALL MATERIALS DESIGNATED FOR REMOVAL SHALL BE DISPOSED OF OFF-SITE.
6. CONTRACTOR SHALL DISCUSS PLACEMENT OF HARDSCAPE AND STRUCTURAL ELEMENTS ON SUITABLE GRADE WITH THE CITY OR THE CITY'S AUTHORIZED REPRESENTATIVE.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND STAKING ALL SEWER, WATER AND UTILITY LINES ABOVE OR BELOW GRADE THAT MIGHT BE DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS. CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR ANY COST INCURRED FOR REPAIR, RESTORATION, OR REPLACEMENT OF AFOREMENTIONED UTILITIES DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS.
8. ABANDONED PIPES SHALL BE CAPPED OR PLUGGED IN A MANNER APPROVED BY THE CITY.
9. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, MANUFACTURER'S CUT OR DATA SHEETS FOR APPROVAL PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL FURNISH TO THE CITY OR THE CITY'S AUTHORIZED REPRESENTATIVE A CERTIFICATE OF COMPLIANCE FOR SUCH FURNISHED MATERIALS.
10. UNLESS DESIGNATED ON THE DRAWINGS OTHERWISE, MATERIALS TO BE PURCHASED AND FURNISHED BY THE CONTRACTOR SHALL BE NEW.
11. TEMPORARY SIGNS SHALL BE PROVIDED DURING CONSTRUCTION UNTIL EXISTING SIGNS ARE REINSTALLED.



1 PARK SIGN
N.T.S.

P-CO-04



HARDSCAPE PLAN
1/8" = 1'-0"

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

TORRANCE CENTENNIAL PLAZA, FEAP-739

HARDSCAPE PLAN

SCALE: AS SHOWN

SHEET 2 OF 11

PLAN NO.

LS-71

BENCHMARK:

ELEVATIONS AS SHOWN HEREON ARE IN TERMS OF THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) BASED LOCALLY UPON THE FOLLOWING COUNTY OF LOS ANGELES BENCHMARK(S):

NAME	NGVD29 ELEV. (FT)
CY 9522	118.84
CY 8324	118.02

BASIS OF COORDINATES:

BEARINGS AND COORDINATES AS SHOWN HEREON ARE IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM OF 1983 (EPOCH 2000.35), ZONE 5; BASED LOCALLY UPON THE FOLLOWING STATE OF CALIFORNIA COR'S STATIONS:

NAME	LATITUDE	LONGITUDE
CRHS 33-49-24.59403	118-16-21.90043	
CRHS 33-49-24.59403	118-16-21.90043	

PLANS PREPARED BY:



RECOMMENDED BY:

Beth Overstreet
PROJECT MANAGER
R.C.E. NO. 63944 (EXP. 09/30/2012)

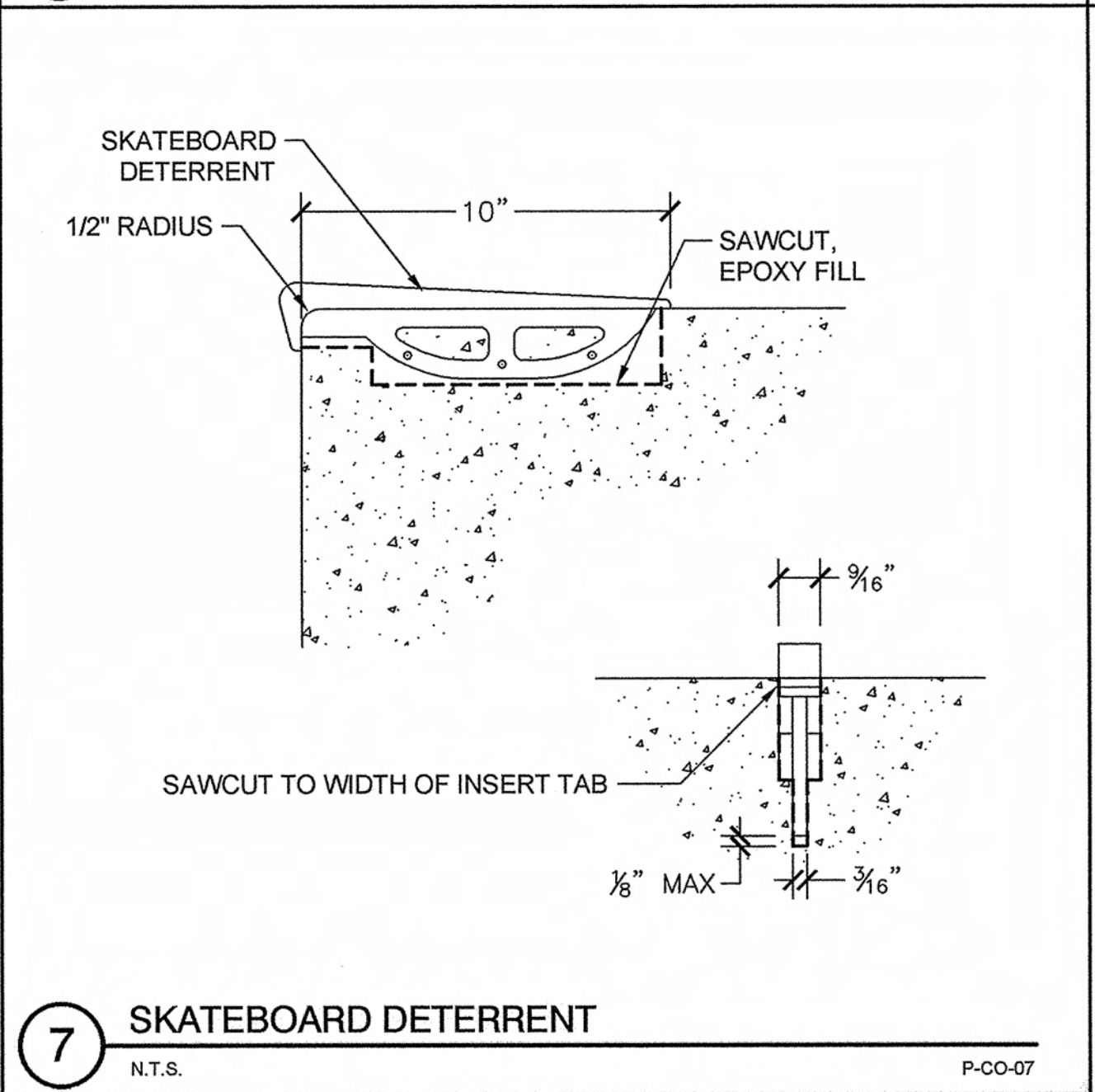
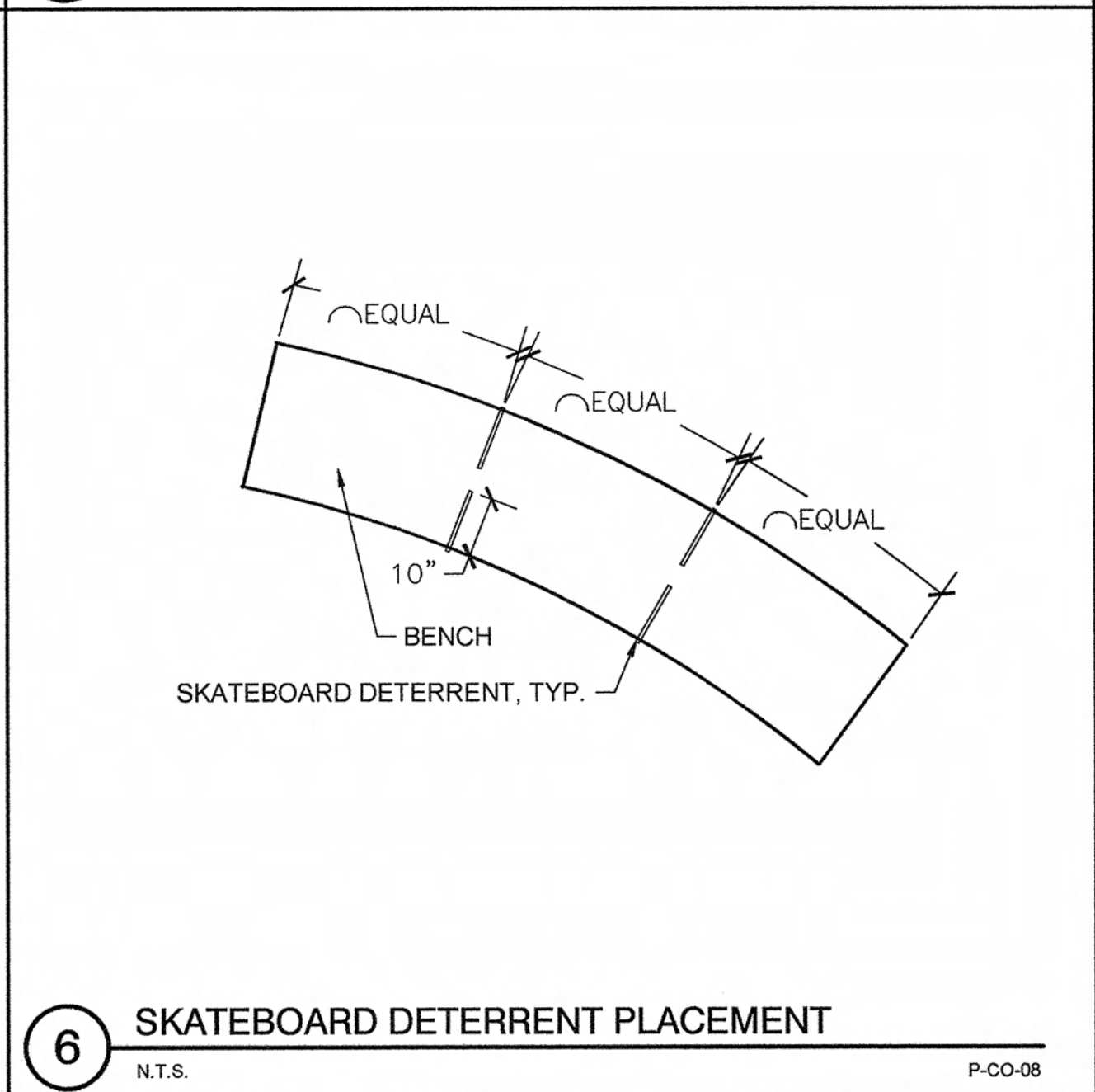
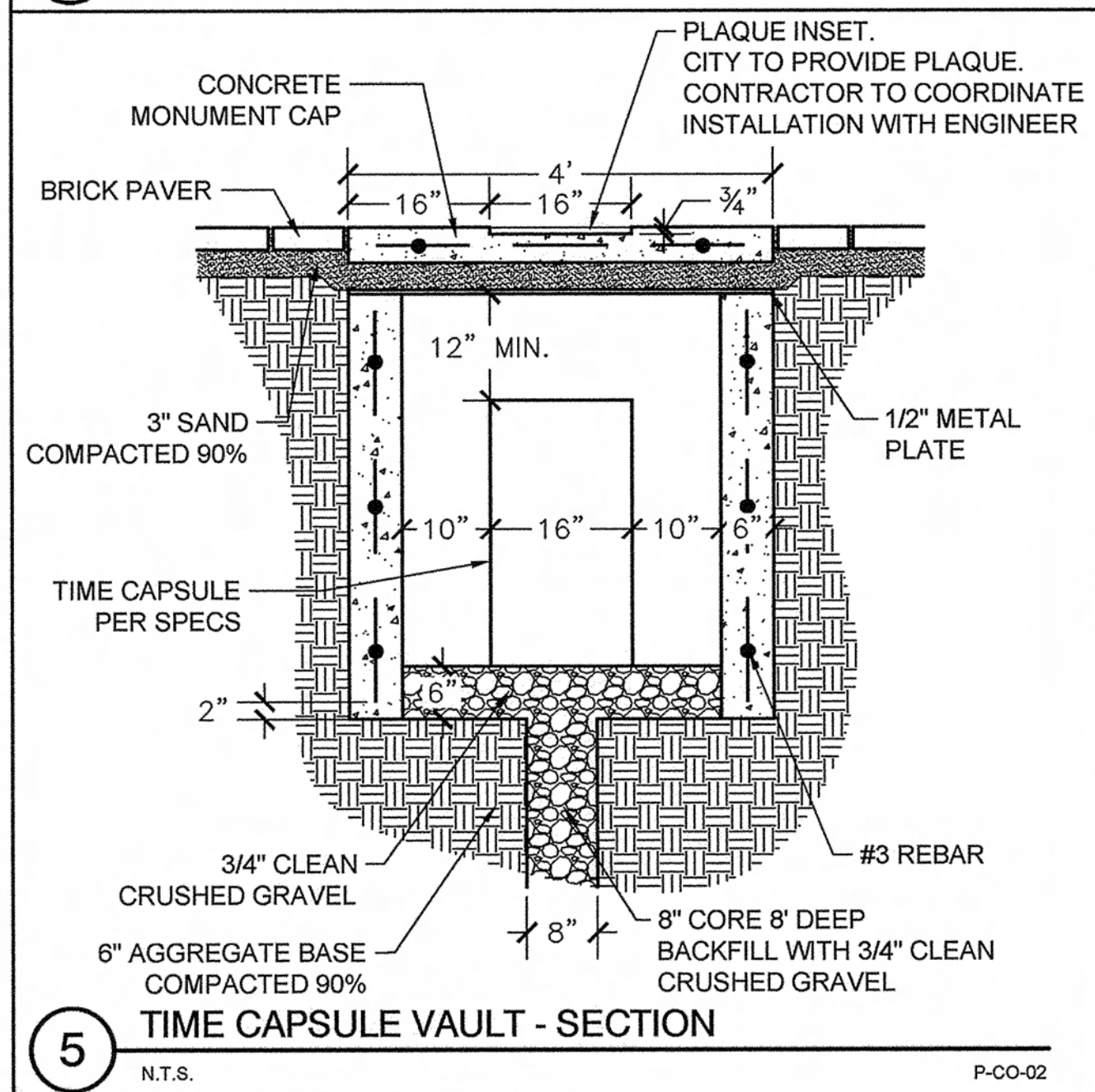
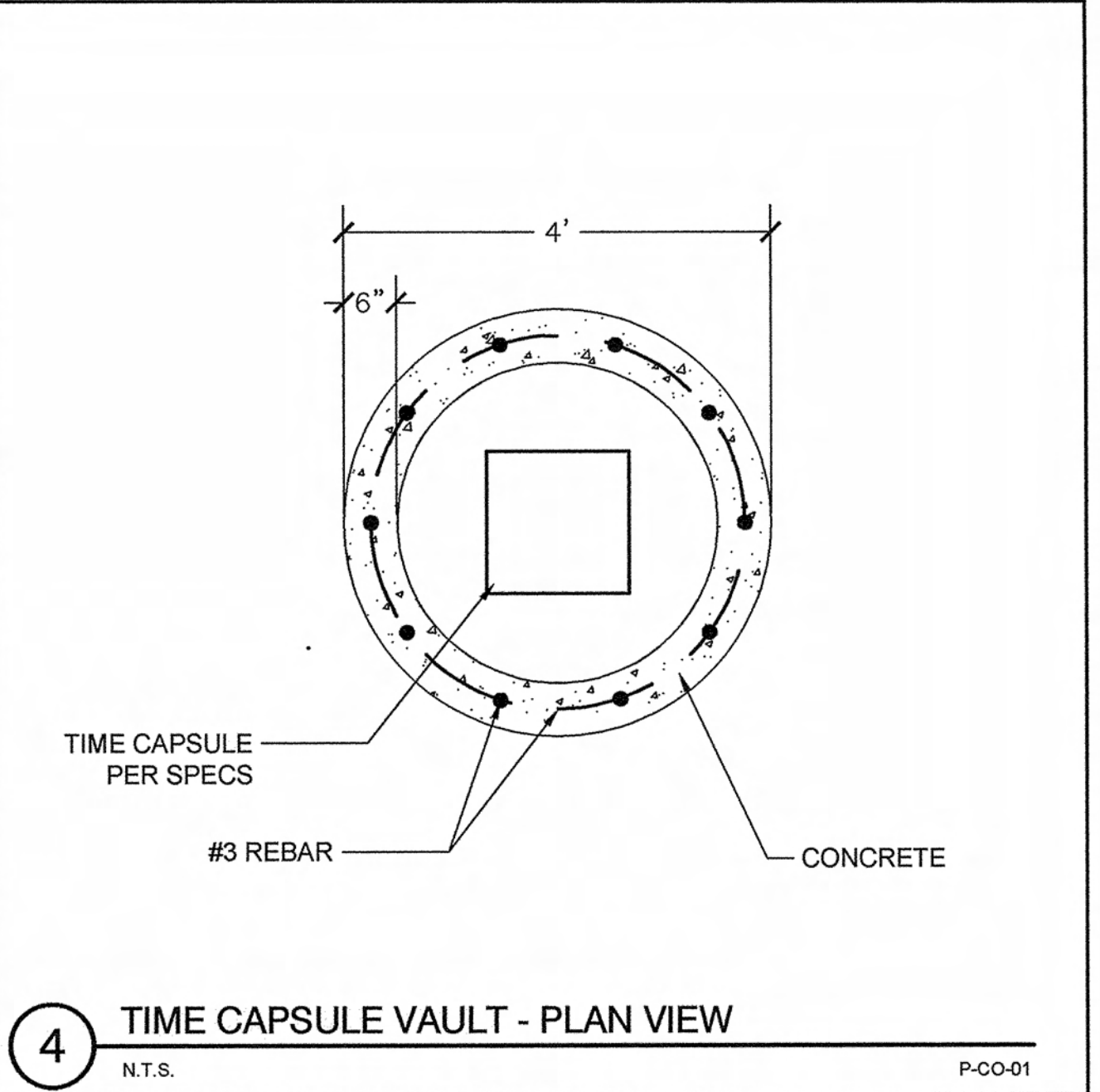
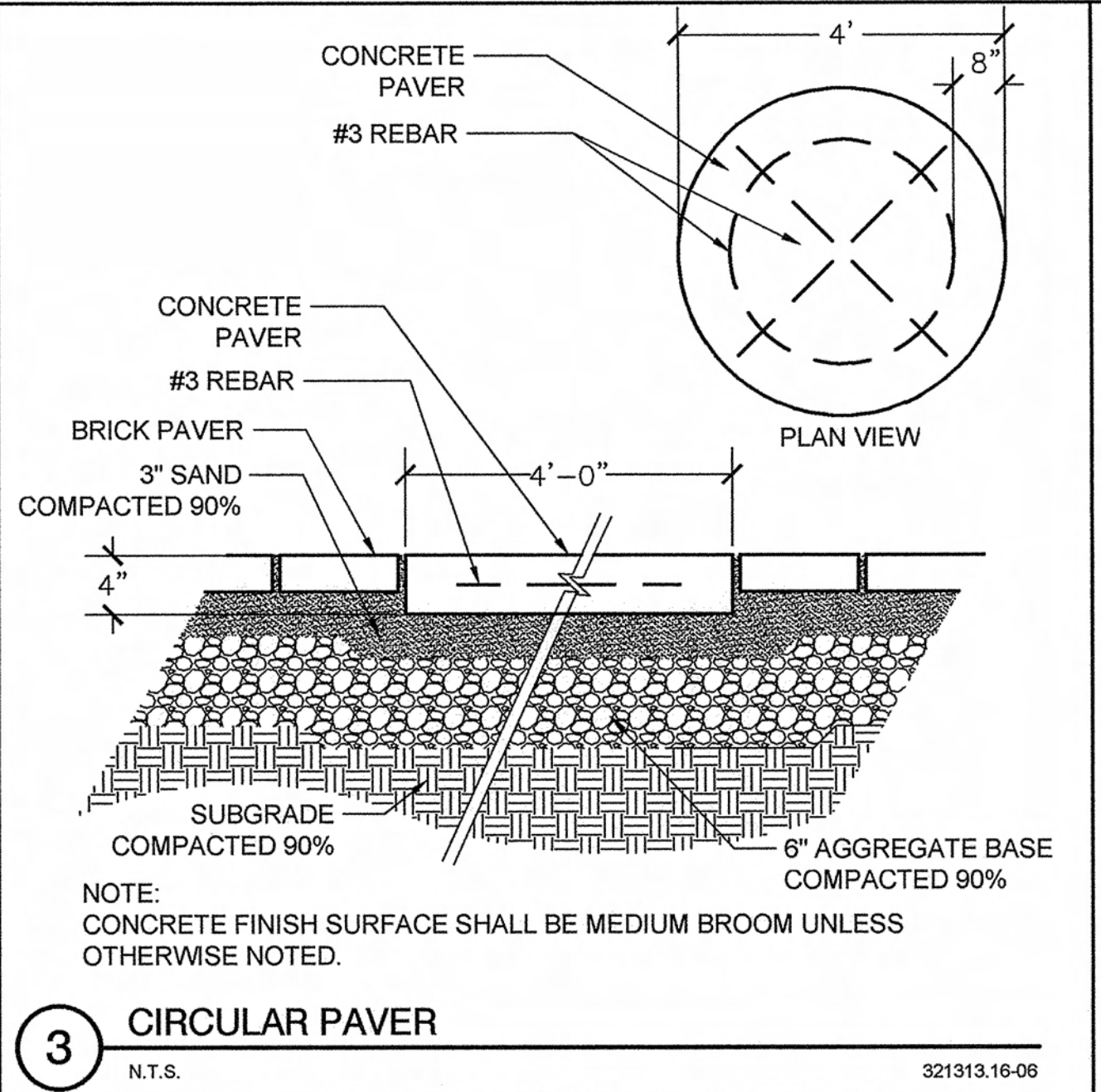
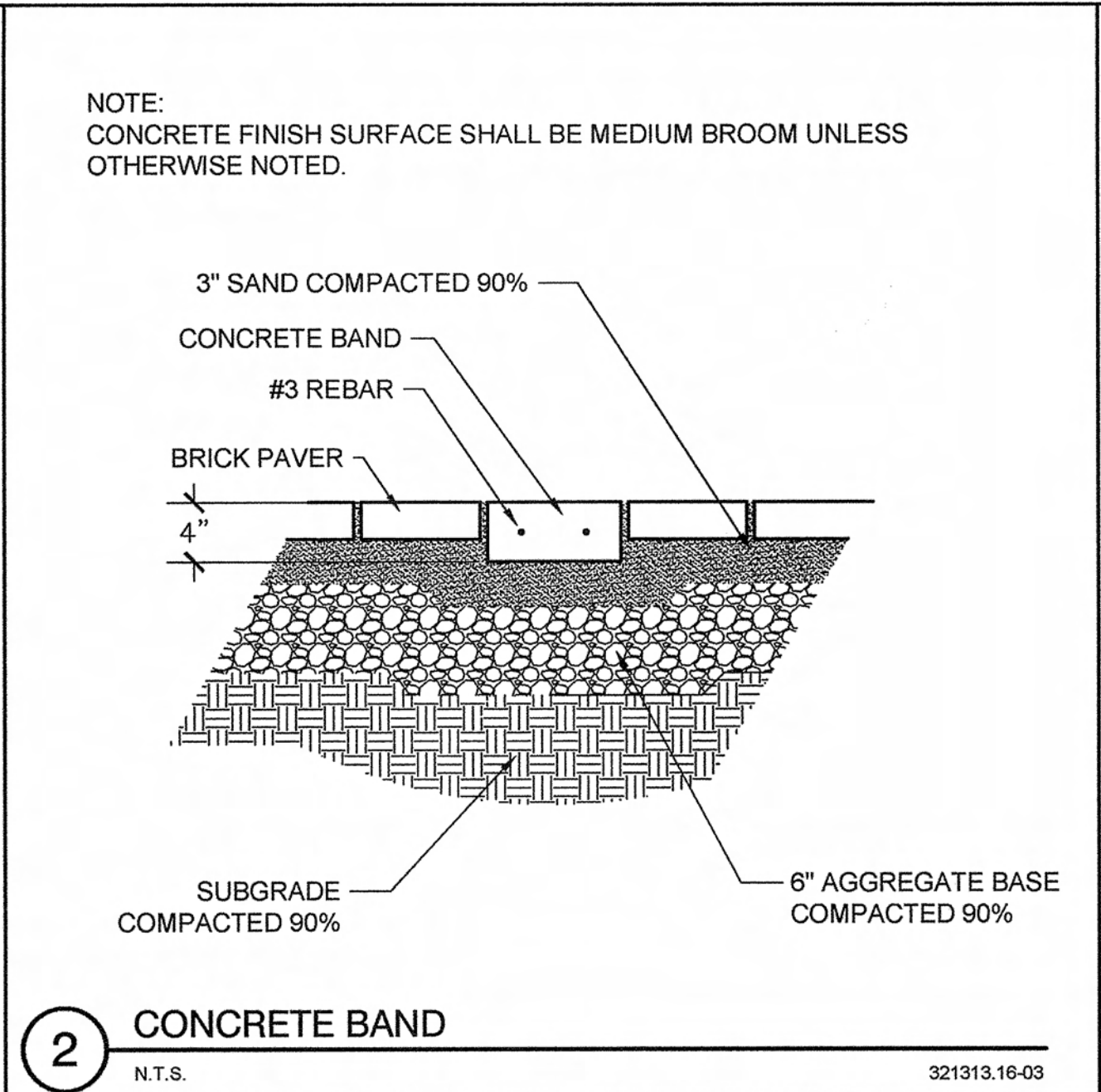
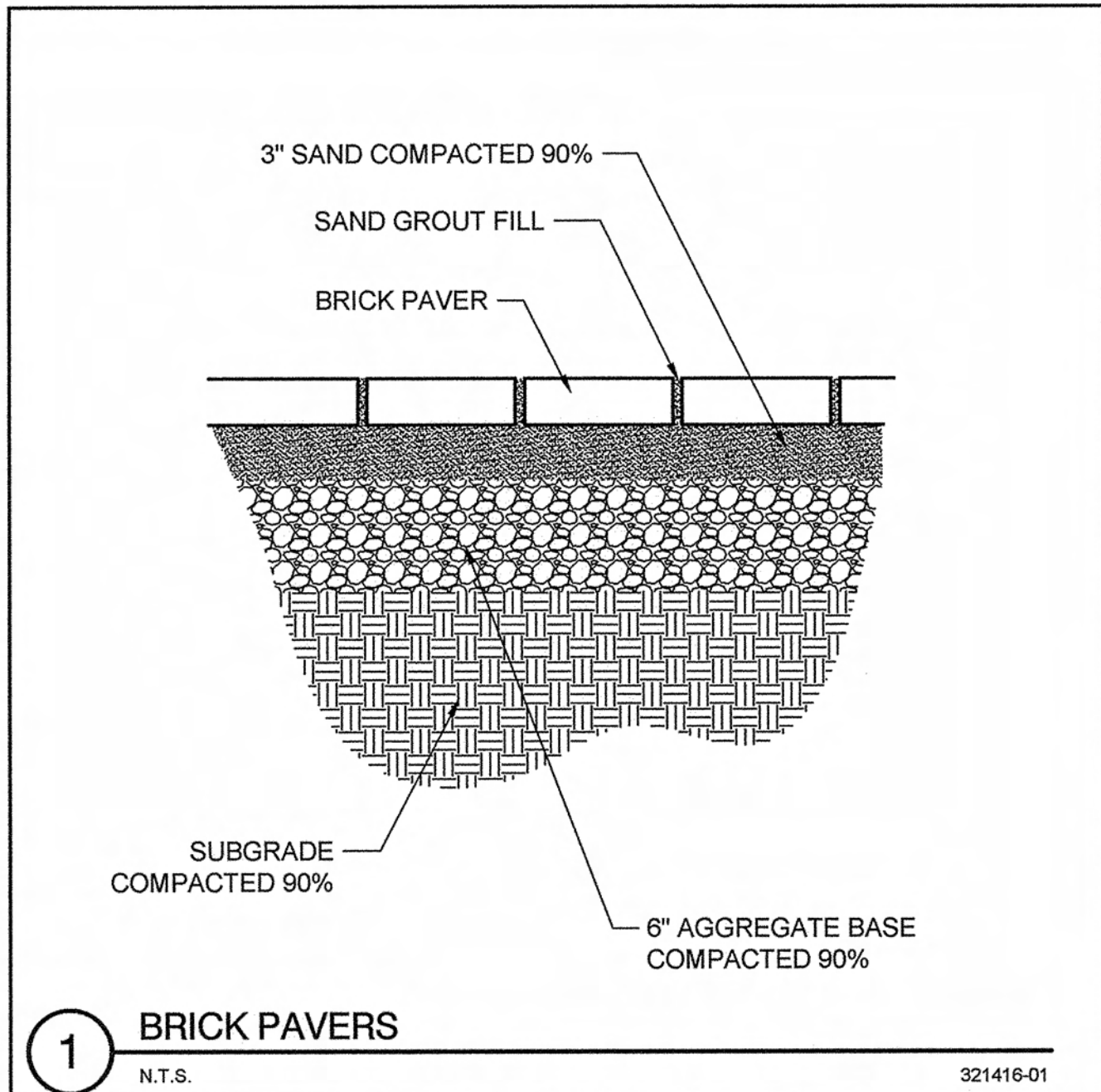
DRAWN BY:

STEPHANIE HARRIS
DESIGNED BY: ARTHUR ALANIZ
PROJECT ENGINEER: LEA REIS, ASSOCIATE ENGINEER

APPROVED BY:

Toufic Jamil Semaan
ACTING CITY ENGINEER
R.C.E. NO. 59226 (EXP. 06/30/2013)





BENCHMARK:
ELEVATIONS AS SHOWN HEREON ARE IN TERMS OF THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) BASED LOCALLY UPON THE FOLLOWING COUNTY OF LOS ANGELES BENCHMARK(S):

NAME	NGVD29 ELEV. (FT)
CY 9522	118.84
CY 8324	118.02

BASIS OF COORDINATES:
BEARINGS AND COORDINATES AS SHOWN HEREON ARE IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM OF 1983 (EPOCH 2000.35), ZONE 5; BASED LOCALLY UPON THE FOLLOWING STATE OF CALIFORNIA CORRS STATIONS:

NAME	LATITUDE	LONGITUDE
CRHS	33-49-24.59403	118-16-21.90043
CRHS	33-49-24.59403	118-16-21.90043

PLANS PREPARED BY:

REVISIONS				
REV	DATE	BY	CHECKED	DESCRIPTION

RECOMMENDED BY:	DRAWN BY:
<i>Beth Overstreet</i> 4/13/12	STEPHANIE HARRIS
BETH OVERSTREET PROJECT MANAGER R.C.E. NO. 63944 (EXP. 09/30/2012)	DESIGNED BY:
	ARTHUR ALANIZ
	<i>Arthur Alaniz</i> 4/13/12
	PROJECT ENGINEER: LEA REIS, ASSOCIATE ENGINEER
	DATE

**CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT**
TORRANCE CENTENNIAL PLAZA, FEAP-739
HARDSCAPE DETAILS

APPROVED BY:	SCALE: AS SHOWN
<i>Toufic Jamil Semaan</i> 4/13/12	SHEET 3 OF 11
TOUFIC JAMIL SEMAAN ACTING CITY ENGINEER R.C.E. NO. 59226 (EXP. 06/30/2013)	PLAN NO. LS-71

LANDSCAPE NOTES:

NATURE OF THE PLANS: THE PLANS ARE DIAGRAMMATIC. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE OF ANY DISCREPANCIES PRIOR TO START OF WORK.

CLEARING AND GRUBBING: THE CONTRACTOR SHALL CLEAR AND GRUB ALL LANDSCAPE IMPROVEMENT AREAS TO A DEPTH OF 8 INCHES BELOW FINISHED GRADE. CLEARING AND GRUBBING OPERATIONS SHALL REMOVE ALL NATURAL AND MAN MADE OBJECTS WITHIN THE SOIL INCLUDING BUT NOT LIMITED TO ALL ROOTS, CLODS AND STONES LARGER THAN 1" GREATEST DIMENSION, POCKETS OF COARSE SAND, NOXIOUS WEEDS, STICKS, BRUSH AND OTHER LITTER, FOOTINGS, ABANDONED PIPES AND UTILITY LINES, AND CONSTRUCTION LITTER, ETC. ALL BULKING OF SOIL RESULTING FROM GRUBBING OPERATIONS SHALL BE UNIFORMLY SPREAD AND COMPACTED TO GRADE OR REMOVED FROM THE SITE AS NECESSARY AT NO ADDITIONAL COST TO THE OWNER. TREES INDICATED "TO REMAIN" SHALL BE PROTECTED IN PLACE BY THE CONTRACTOR.

QUANTITIES: PLANT AND MATERIAL QUANTITIES SHOWN ON THE PLANS ARE FOR CONTRACTOR CONVENIENCE ONLY AND DO NOT LIMIT THE CONTRACTOR TO THOSE SPECIFIC QUANTITIES. PRIOR TO BID SUBMITTAL, THE CONTRACTOR SHALL VERIFY PLANT COUNTS AND FURNISH THE QUANTITIES AS NECESSARY TO DO THE SPECIFIED WORK.

TOPSOIL: IN FORMERLY PAVED AREAS, THE CONTRACTOR SHALL REMOVE THE TOP 18 INCHES AND BACKFILL WITH AN APPROVED CLASS "A" IMPORTED TOP SOIL CAPABLE OF SUSTAINING HEALTHY PLANT LIFE. IT SHALL BE OF A UNIFORM COMPOSITION AND STRUCTURE, FERTILE AND FRIABLE SANDY LOAM CONTAINING AN AMOUNT OF ORGANIC MATTER NORMAL TO THE REGION, AND SHALL NOT BE INFESTED WITH NEMATODES OR OTHER UNDESIRABLE INSECTS AND PLANT DISEASE ORGANISMS. TOPSOIL SHALL BE FROM A SOURCE DESIGNATED BY THE CONTRACTOR AND APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE. THE CONTRACTOR SHALL GUARANTEE THE QUALITY OF THE TOPSOIL WITH A CERTIFIED AGRICULTURAL SUITABILITY EVALUATION REPORT (SOIL AND PLANT LAB, ORANGE COUNTY (714) 282-8777. SUBMIT THE EVALUATION REPORT TO THE OWNER'S AUTHORIZED REPRESENTATIVE FOR APPROVAL 30 DAYS PRIOR TO ANY TOPSOIL PURCHASE.

SOILS TESTING: TEST SOIL FOUND IN-PLACE IN THE DESIGNATED LANDSCAPE AREAS, INCLUDING SOIL COMPACTED IN PLACE AS PART OF THE EARTHWORK. TEST SAMPLES OF ON-SITE SOILS SHALL BE TAKEN UNDER THE SUPERVISION AND DIRECTION OF THE OWNER OR THEIR AUTHORIZED REPRESENTATIVE (MAXIMUM OF 10 SAMPLES). SOIL AMENDMENTS SHALL BE ADDED IN ACCORDANCE TO THE SOILS TESTING LABORATORY'S RECOMMENDATION UPON WRITTEN APPROVAL OF THE OWNER OR THEIR AUTHORIZED REPRESENTATIVE. SOIL AMENDMENTS

SPECIFIED ARE A REQUIRED MINIMUM FOR BIDDING PURPOSES AND SHALL BE MODIFIED IN ACCORDANCE TO THE SOILS TEST WRITTEN RECOMMENDATIONS. ALONG WITH SOIL TEST SAMPLES THE CONTRACTOR SHALL SUBMIT TO THE TESTING LABORATORY A COPY OF THE PLANT LIST.

FINISHED GRADES: SHALL BE 1" BELOW TOP OF SURROUNDING HARDSURFACES FOR GROUND COVER AREAS AND 2" IN LAWN AREAS.

SOIL AMENDMENTS: TILL INTO THE TOP 6" OF TOPSOIL THE FOLLOWING AMOUNTS OF ORGANIC SOIL AMENDMENTS PER 1,000 SQUARE FEET OF PLANTING AREA:

1. 6 CUBIC YARDS OF NITROGEN FORTIFIED WOOD COMPOST.
2. 10 POUNDS OF SOIL SULFUR.
3. 15 POUNDS OF A 12-12-12 COMMERCIAL FERTILIZER.

PLANTING HOLE BACKFILL SHALL CONSIST OF:

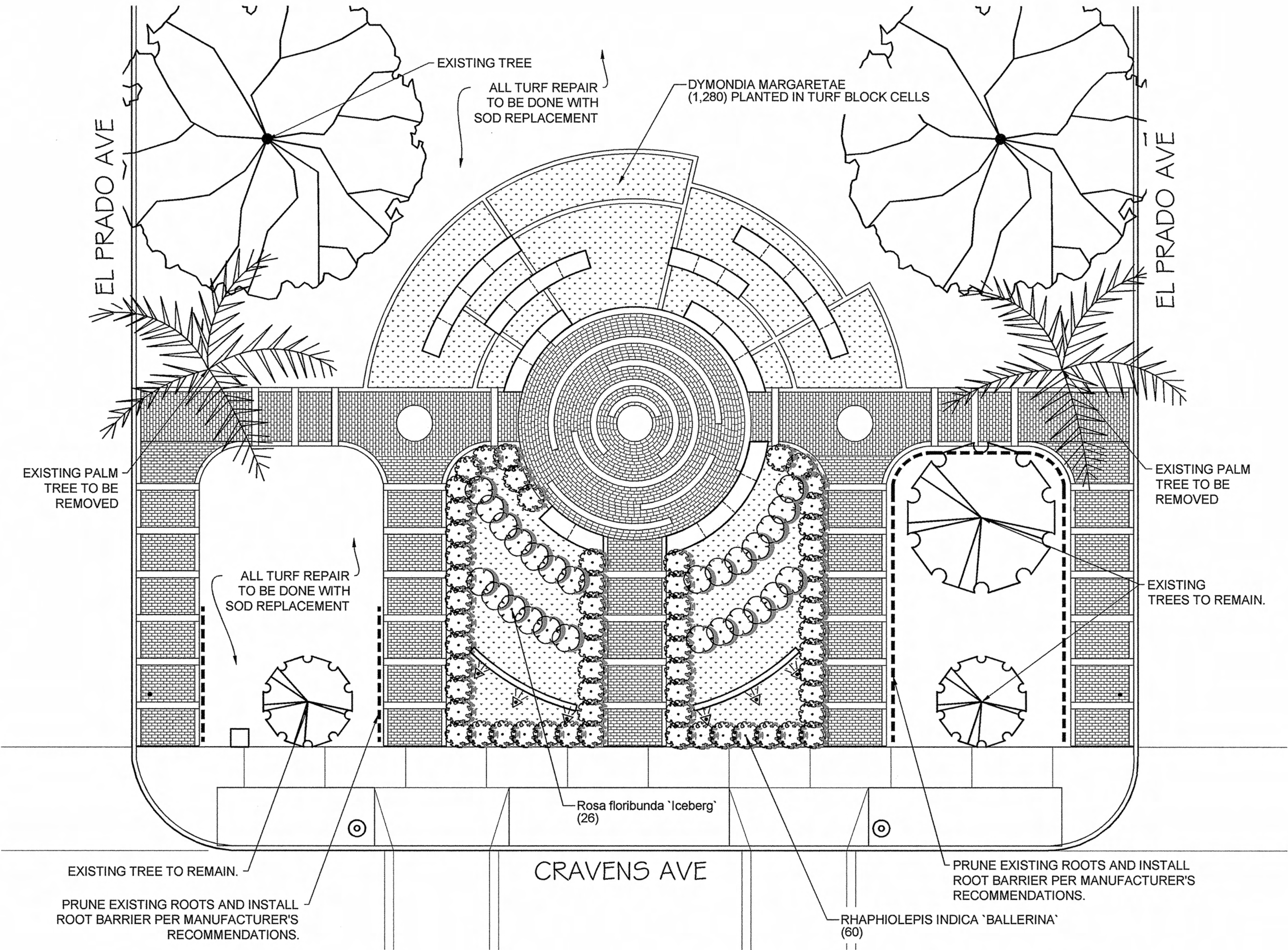
1. 60 PERCENT SANDY TEXTURED CLASS "A" TOP SOIL.
2. 40 PERCENT NITROGEN FORTIFIED WOOD COMPOST.
3. 1 POUND 12-12-12 COMMERCIAL FERTILIZER PER CUBIC YARD OF BACKFILL MIX.
4. 2 POUNDS IRON SULFATE PER CUBIC YARD OF BACKFILL MIX.

PLANT MATERIALS: PROVIDE PLANTS OF THE SPECIES, KINDS, SIZES, AND SPACING, ETC., AS NOTED ON THE DRAWINGS. PLANTS SHALL BE SYMMETRICALLY, TYPICAL FOR VARIETY AND SPECIES, SOUND, HEALTHY, VIGOROUS, FREE FROM PLANT DISEASE, INSECT PESTS OR THEIR EGGS, AND SHALL HAVE HEALTHY, NORMAL ROOT SYSTEMS, WELL FILLING THEIR CONTAINERS, BUT NOT TO THE POINT OF BEING ROOTBOUND.

APPLICATION OF PRE-EMERGENT HERBICIDES: AFTER FINISH GRADING AND IMMEDIATELY AFTER PLANTING TREAT ALL NON-SEEDED PLANTING AREAS WITH A PRE-EMERGENT WEED AND GRASS SEED CONTROL AGENT; APPLY IN ACCORDANCE WITH THEIR MANUFACTURER'S RECOMMENDATIONS, (DYMID, EPTAM, BETASAN).


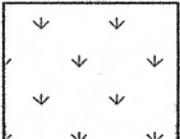
GUARANTEES: THE CONTRACTOR SHALL WARRANT ALL WORK FOR A PERIOD OF ONE YEAR FROM DATE OF THE FINAL POST-MAINTENANCE INSPECTION ACCEPTANCE. ALL SHRUBS SHALL BE WARRANTED FOR A PERIOD OF 6 MONTHS. THE WARRANTY DOES NOT INCLUDE ITEMS DAMAGED DUE TO OWNER NEGLECT OR ACTS OF GOD.

BOOK FORM SPECIFICATIONS: SEE BID ITEM SPECIFICATIONS FOR ADDITIONAL LANDSCAPE REQUIREMENTS AND REFERENCE SPECIFICATION (GREENBOOK).




PLANTING & LIGHTING PLAN
1/8" = 1'-0"

PLANT SCHEDULE

SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	QTY	REMARKS
	Rhaphiolepis indica 'Ballerina'	Ballerina Indian Hawthorn	5 gal	60	
	Rosa floribunda 'Iceberg'	Iceberg Rose	5 gal	26	
GROUND COVERS	BOTANICAL NAME	COMMON NAME	SIZE	QTY	REMARKS
	Dymondia margaretae	Dymondia	flat @ 12" oc	1,330	

LIGHTING SCHEDULE

SYMBOL	DESCRIPTION	QTY	Material	Finish	Electrical	Lamp	Color Temp	Mounting
	SPJ-CBWL-16	6	Brass	Black	LED	FB-3W-CYL-TA105	2700K	In-Ground (Flush)

NOTE: MTP300-SS TRANSFORMER WITH T-1703 TIMER TO BE INSTALLED INSIDE EXISTING IRRIGATION CABINET. ALL INSTALLATIONS TO BE AS SPECIFIED PER MANUFACTURER.

BENCHMARK:

ELEVATIONS AS SHOWN HEREON ARE IN TERMS OF THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) BASED LOCALLY UPON THE FOLLOWING COUNTY OF LOS ANGELES BENCHMARK(S):

NAME	NGVD29 ELEV. (FT)
CY 9522	118.84
CY 8324	118.02

BASIS OF COORDINATES:

BEARINGS AND COORDINATES AS SHOWN HEREON ARE IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM OF 1983 (EPOCH 2000.35), ZONE 5; BASED LOCALLY UPON THE FOLLOWING STATE OF CALIFORNIA CORN STATIONS:

NAME	LATITUDE	LONGITUDE
CRHS	33-49-24.59403	118-16-21.90043
CRHS	33-49-24.59403	118-16-21.90043

PLANS PREPARED BY:



RECOMMENDED BY:

Beth Overstreet
PROJECT MANAGER
R.C.E. NO. 63944 (EXP. 09/30/2012)

DRAWN BY:

STEPHANIE HARRIS

DESIGNED BY:

ARTHUR ALANIZ

PROJECT ENGINEER:

LEA REIS, ASSOCIATE ENGINEER
DATE

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

TORRANCE CENTENNIAL PLAZA, FEAP-739

PLANTING AND LIGHTING PLAN

APPROVED BY:



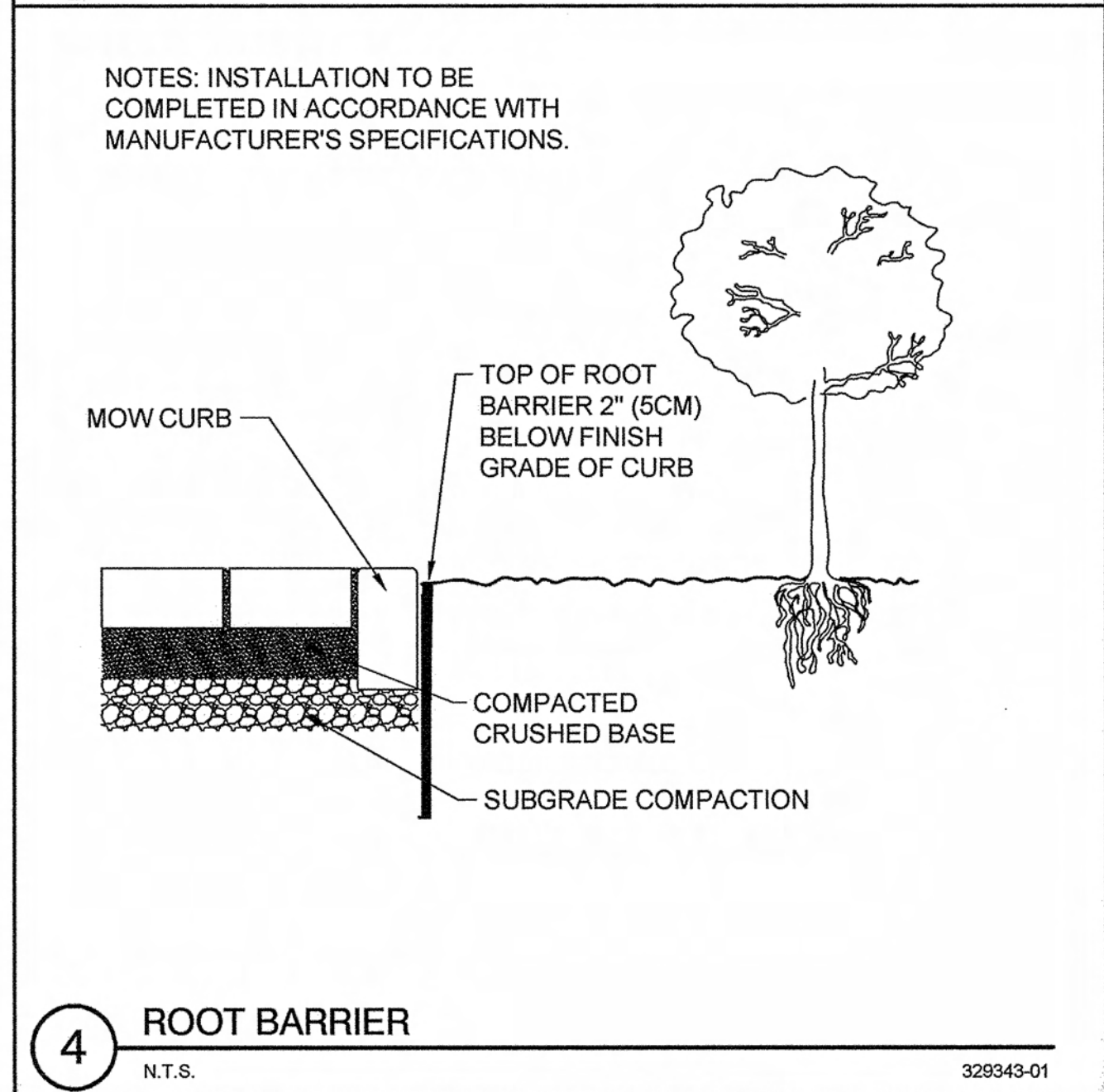
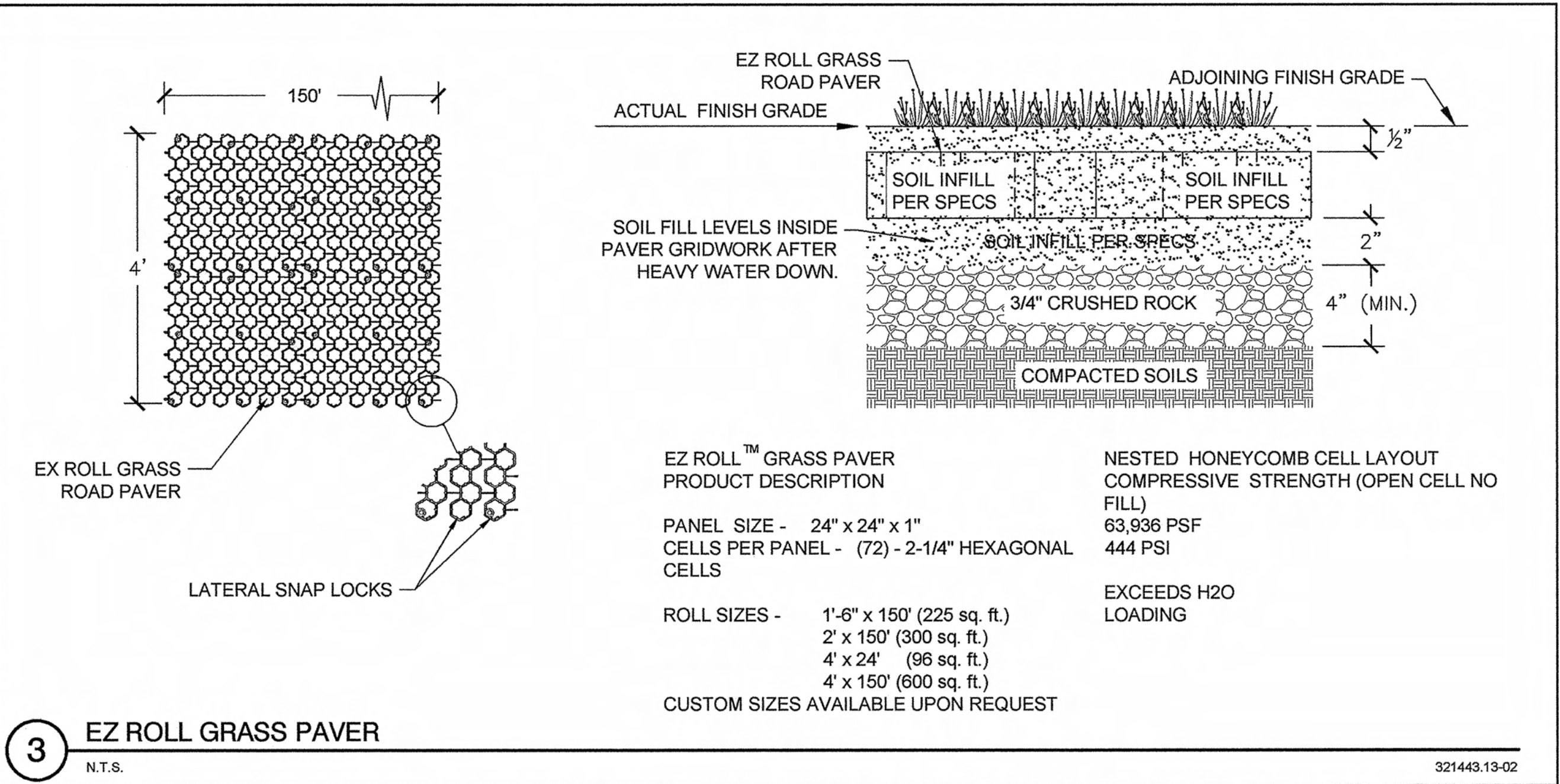
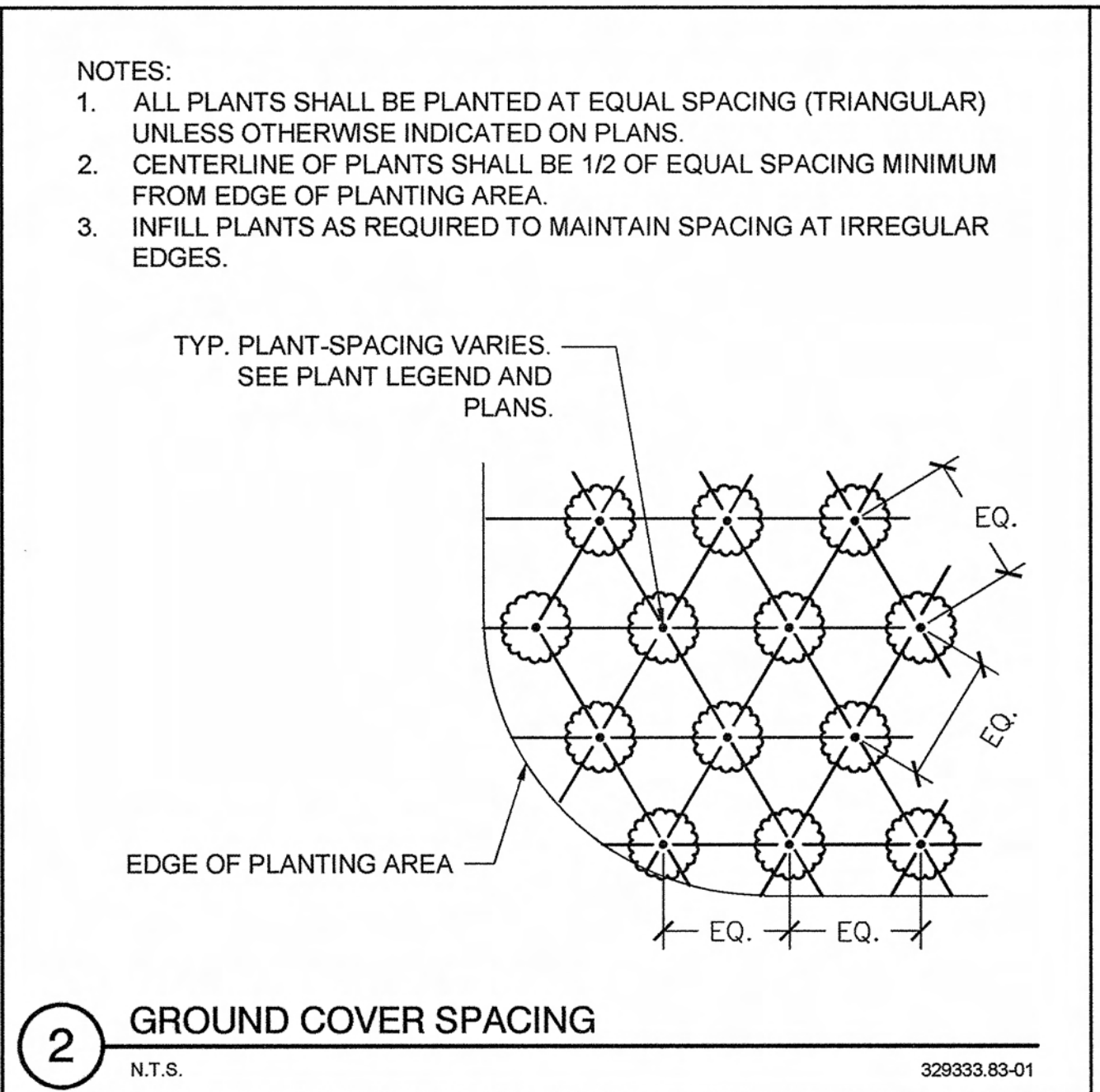
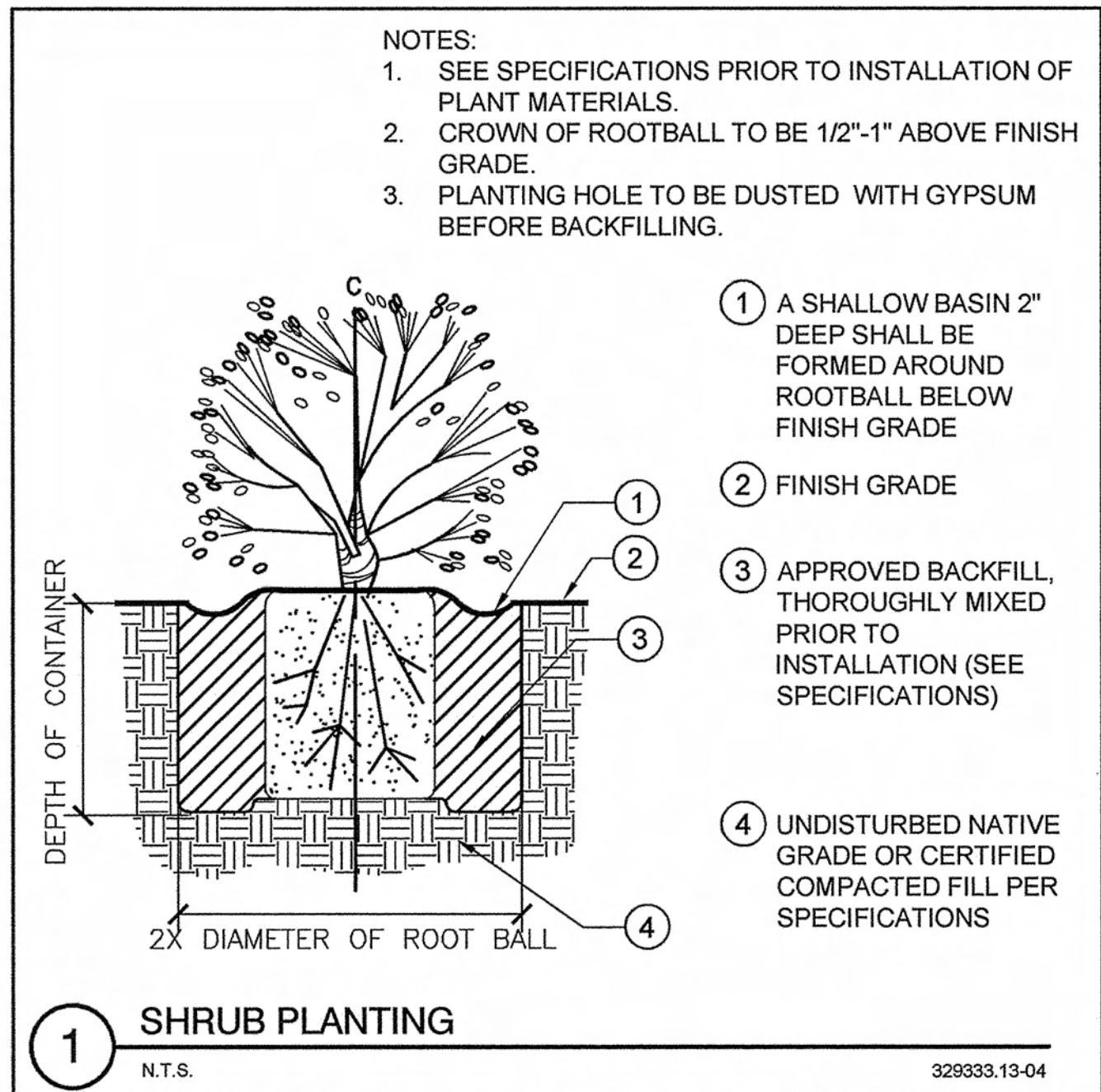
TOUFIC JAMIL SEMAAN
ACTING CITY ENGINEER
R.C.E. NO. 59226 (EXP. 06/30/2013)

SCALE: AS SHOWN

SHEET 4 OF 11

PLAN NO.

LS-71



REVISIONS				
REV	DATE	BY	CHECKED	DESCRIPTION

**CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT**

TORRANCE CENTENNIAL PLAZA, FEAP-739

PLANTING DETAILS

APPROVED BY: DATE: 4/13/2012

RECOMMENDED BY: DATE: 4/13/12

DRAWN BY: STEPHANIE HARRIS

DESIGNED BY: ARTHUR ALANIZ

PROJECT ENGINEER: LEA REIS, ASSOCIATE ENGINEER DATE

NO. C59226
Exp. 6/30/13
CIVIL
STATE OF CALIFORNIA

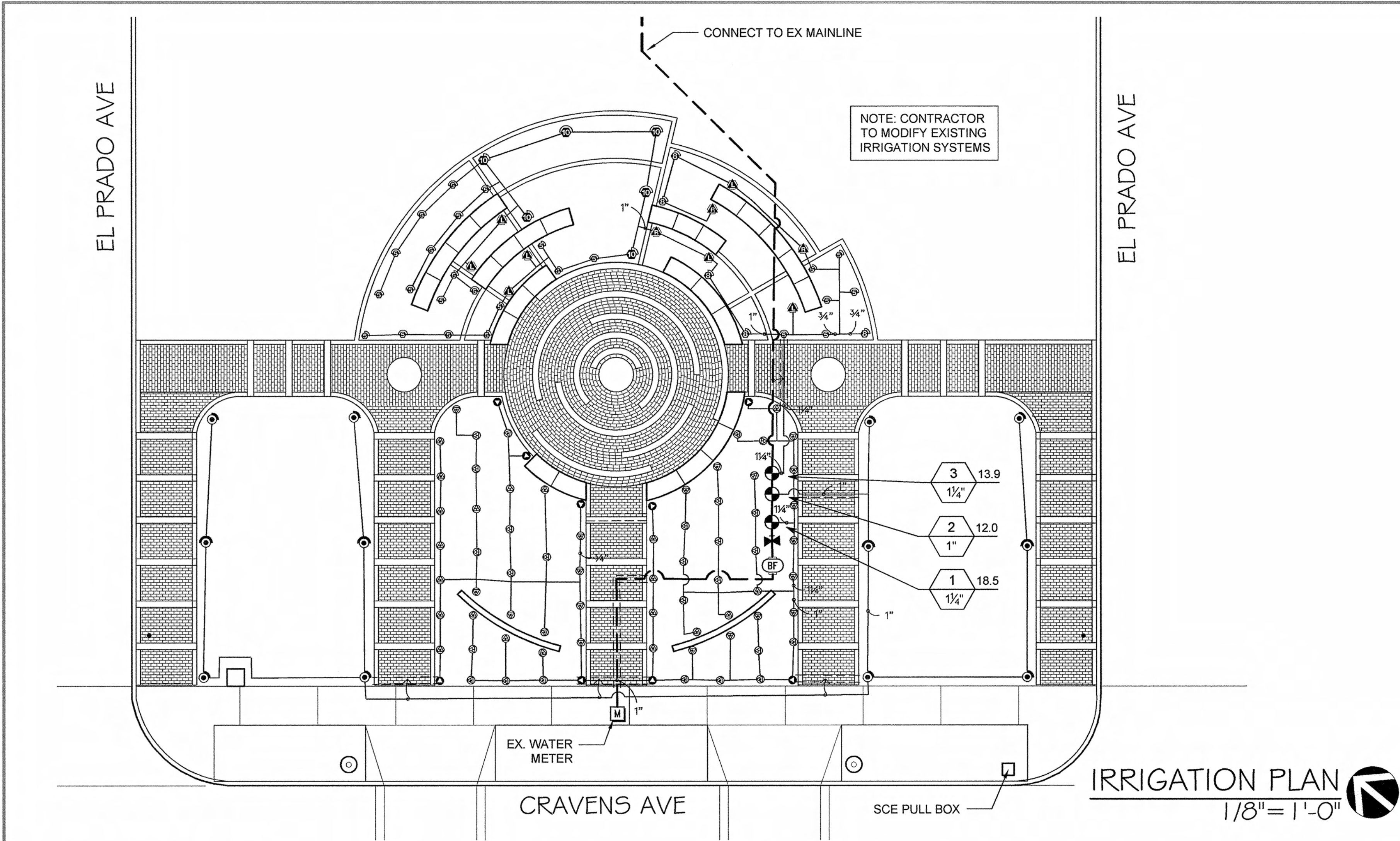
TOUFIC JAMIL SEMAAN
ACTING CITY ENGINEER
R.C.E. NO. 59226 (EXP. 06/30/2013)

SCALE: AS SHOWN


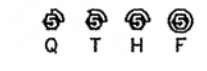
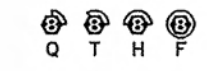


SHEET 5 OF 11


PLAN NO. **LS-71**




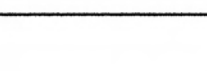
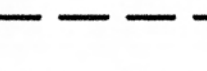
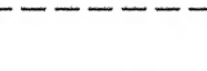
BENCHMARK: ELEVATIONS AS SHOWN HEREON ARE IN TERMS OF THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) BASED LOCALLY UPON THE FOLLOWING COUNTY OF LOS ANGELES BENCHMARK(S): NAME: NGVD29 ELEV. (FT) CY 9522 118.84 CY 8324 118.02		BASIS OF COORDINATES: BEARINGS AND COORDINATES AS SHOWN HEREON ARE IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM OF 1983 (EPOCH 2000.35), ZONE 5; BASED LOCALLY UPON THE FOLLOWING STATE OF CALIFORNIA CORS STATIONS: NAME LATITUDE LONGITUDE CRHS 33-49-24.59403 118-16-21.90043 CRHS 33-49-24.59403 118-16-21.90043		PLANS PREPARED BY: 3025 border avenue torrance ca 90504 T 310/780055 F 310/780221	
---	--	---	--	---	--

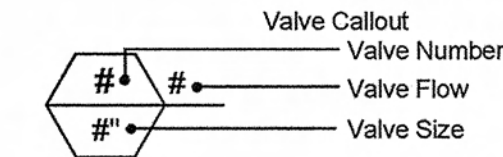


IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	DETAIL
	Rain Bird 1806 15 Strip Series Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Viper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet.	10	30	2/L-3.1
	Rain Bird 1806 5 Series MPR Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Viper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet.	25	30	2/L-3.1
	Rain Bird 1806 8 Series MPR Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Viper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet.	5	30	2/L-3.1
	Rain Bird 1806 10 Series MPR Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Viper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet.	6	30	2/L-3.1
	Rain Bird 1804-SAM-P45-R17-24 17'-24' Rotary Stream, w/1804 turf spray body, 4.0" pop-up, with check valve and in-stem pressure regulator.	12	30	

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	DETAIL
	Rain Bird SQ Series ADP Square Spray SQ Series Square Pattern Nozzle low-volume spray with SQ ADP PolyFlex Riser adapter on riser length as indicated.	76	1/L-3.1

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	DETAIL
	Rain Bird GB Brass Electric Remote Control Valve	3	5/L-3.1
	Nibco T-FP600a 1/4 turn ball valve, same size as mainline pipe diameter at valve location. Size Range - 1/4"-2".	1	3/L-3.1
	New Reduced Pressure Backflow 2" Febco 825Y or equivalent. To be supplied and installed by the City of Torrance	1	
	Irrigation Lateral Line: PVC Schedule 40 PVC Schedule 40 irrigation pipe. Only lateral transition pipe sizes 1" and above are indicated on the plan, with all others being 3/4" in size.	837.5 l.f.	
	Irrigation Mainline: PVC Schedule 80	121.1 l.f.	
	Pipe Sleeve: PVC Schedule 40 Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall allow for irrigation piping and their related couplings to easily slide through sleeving material. Extend sleeves 18 inches beyond edges of paving or construction.	61.7 l.f.	



IRRIGATION NOTES:

- DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTMENTS NECESSARY TO CONFORM TO ACTUAL FIELD CONDITIONS. EQUIPMENT SHOWN IN PAVED AREAS ARE FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED, WHENEVER POSSIBLE, WITHIN PLANTING AREAS OR LOCATED AS REQUESTED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
- THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO FURNISH AND INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THESE DRAWINGS IN ACCORDANCE WITH THE IRRIGATION LEGEND, AND AS DESCRIBED IN THESE NOTES AND IN ACCORDANCE WITH APPLICABLE CODES, DETAILS, AND/OR THE MANUFACTURER'S WRITTEN RECOMMENDATIONS. COSTS INCURRED DUE TO ANY ADJUSTMENT, INCLUDING THOSE REQUESTED BY THE OWNER'S AUTHORIZED REPRESENTATIVE, RELATIVE TO THE LOCATION OR INSTALLATION OF EQUIPMENT AS SHOWN ON THE DRAWINGS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL REVIEW ALL EXISTING SITE CONDITIONS PRIOR TO SUBMITTING BID AND PRIOR TO COMMENCING INSTALLATION. IF ANY DISCREPANCIES EXIST, THEY SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE.
- THE IRRIGATION SYSTEM HAS BEEN DESIGNED BASED ON A MINIMUM OPERATING PRESSURE AND MAXIMUM GPM DEMAND. THE CONTRACTOR SHALL VERIFY THE MINIMUM OPERATING PRESSURE AT EACH POINT OF CONNECTION PRIOR TO COMMENCING INSTALLATION.
- THE CONTRACTOR SHALL VERIFY LOCATION OF ALL SERVICES AND UNDERGROUND UTILITIES AND SHALL ASSUME RESPONSIBILITY FOR ANY DAMAGE INCURRED DURING HIS WORK.
- PRIOR TO COMMENCING WORK ON THE PROJECT, THE CONTRACTOR SHALL ARRANGE AN ON SITE CONFERENCE WITH THE OWNER'S AUTHORIZED REPRESENTATIVE TO DISCUSS THE USE OF MATERIALS, INSTALLATION METHODS, AND ANY CLARIFICATIONS.
- THE IRRIGATION CONTRACTOR SHALL COORDINATE AND MAKE IRRIGATION CONNECTION AT BOTH ELECTRICAL AND WATER SERVICE POINTS AS DESIGNATED BY BOTH THE GENERAL AND PLUMBING CONTRACTOR PRIOR TO THE START OF THE OVER-ALL PROJECT CONSTRUCTION.
- ALL IN GROUND NON-PRESSURE LINES SHALL BE PVC SCHEDULE 40 (MIN. 3/4") WITH PVC SCHEDULE 40 SOLVENT-WELD FITTINGS. ALL IN GROUND PRESSURE MAINS SHALL BE SCH. 80 PVC WITH SCH 80 PVC FITTINGS. ALL IN GROUND NON-PRESSURE AND PRESSURE LINES SHALL BE INSTALLED IN PLANTERS AND LAWN AREAS WHENEVER POSSIBLE.
- THREADED FITTINGS AND RISERS SHALL BE SCHEDULE 80 PVC UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
- ALL PIPES UNDER PAVED AREAS SHALL BE INSTALLED IN OVERSIZED PVC SCHEDULE 40 PIPE SLEEVES PRIOR TO PAVING (MINIMUM TWICE THE DIAMETER OF THE IRRIGATION OR ELECTRICAL LINES, UNLESS OTHERWISE INDICATED ON THE DRAWINGS).
- THE CONTRACTOR SHALL FLUSH ALL IRRIGATION LINES AND ADJUST ALL IRRIGATION HEADS FOR 100% COVERAGE AND TO PREVENT OVERSPRAY ONTO WALKS, WALLS, DRIVEWAYS, AND BUILDING.
- BACKFLOW DEVICES SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH THE DRAWINGS AND LOCAL PLUMBING CODE, BY THE CITY OF TORRANCE.
- IRRIGATION HEADS IN AREAS ADJACENT TO WALKS, CURBS OR OTHER MOUNTABLE HARDSCAPE SHALL BE POP-UPS.
- UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL REMOVE ALL HIS MATERIALS, EQUIPMENT, AND WASTE AND DEBRIS TO THE SATISFACTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE.
- THE SPRINKLER INSTALLATION SHALL NOT BE DEEMED "COMPLETE" UNTIL THE CONTRACTOR HAS INSTALLED AND ADJUSTED ALL SPRINKLER HEADS, VALVES, AND ALL RELATED IRRIGATION EQUIPMENT TO THE SATISFACTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE, AND HAS SUBMITTED APPROVED "AS-BUILT" DRAWINGS.
- THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, CONFERENCE AND INSPECTIONS REQUIRED BY THE CITY FOR HIS PORTION OF THE WORK.
- BOOK FORM SPECIFICATIONS: SEE BID SPECIFICATIONS FOR ADDITIONAL IRRIGATION REQUIREMENTS AND REFERENCE SPECIFICATION (GREENBOOK).

BENCHMARK:

ELEVATIONS AS SHOWN HEREON ARE IN TERMS OF THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) BASED LOCALLY UPON THE FOLLOWING COUNTY OF LOS ANGELES BENCHMARK(S):

NAME:	NGVD29 ELEV. (FT)
CY 9522	118.84
CY 8324	118.02

BASIS OF COORDINATES:

BEARINGS AND COORDINATES AS SHOWN HEREON ARE IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM OF 1983 (EPOCH 2000.35), ZONE 5; BASED LOCALLY UPON THE FOLLOWING STATE OF CALIFORNIA CORRS STATIONS:

NAME	LATITUDE	LONGITUDE
CRHS 33-49-24.59403	118-16-21.90043	
CRHS 33-49-24.59403	118-16-21.90043	

PLANS PREPARED BY:



FEED GROUP
landscape architecture
9001 border street
torrance ca 90503
t 310.783.0385 f 310.782.9291

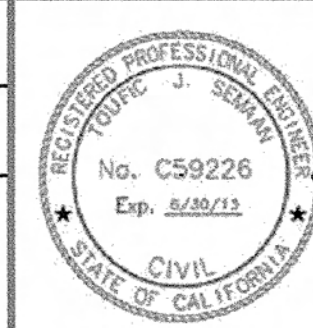
RECOMMENDED BY:

Beth Overstreet 4/13/12
BETH OVERSTREET
PROJECT MANAGER
R.C.E. NO. 63944 (EXP. 09/30/2012)

DRAWN BY:

STEPHANIE HARRIS
DESIGNED BY: ARTHUR ALANIZ
Arthur Alaniz 4/13/12
PROJECT ENGINEER:
LEA REIS, ASSOCIATE ENGINEER DATE

APPROVED BY:



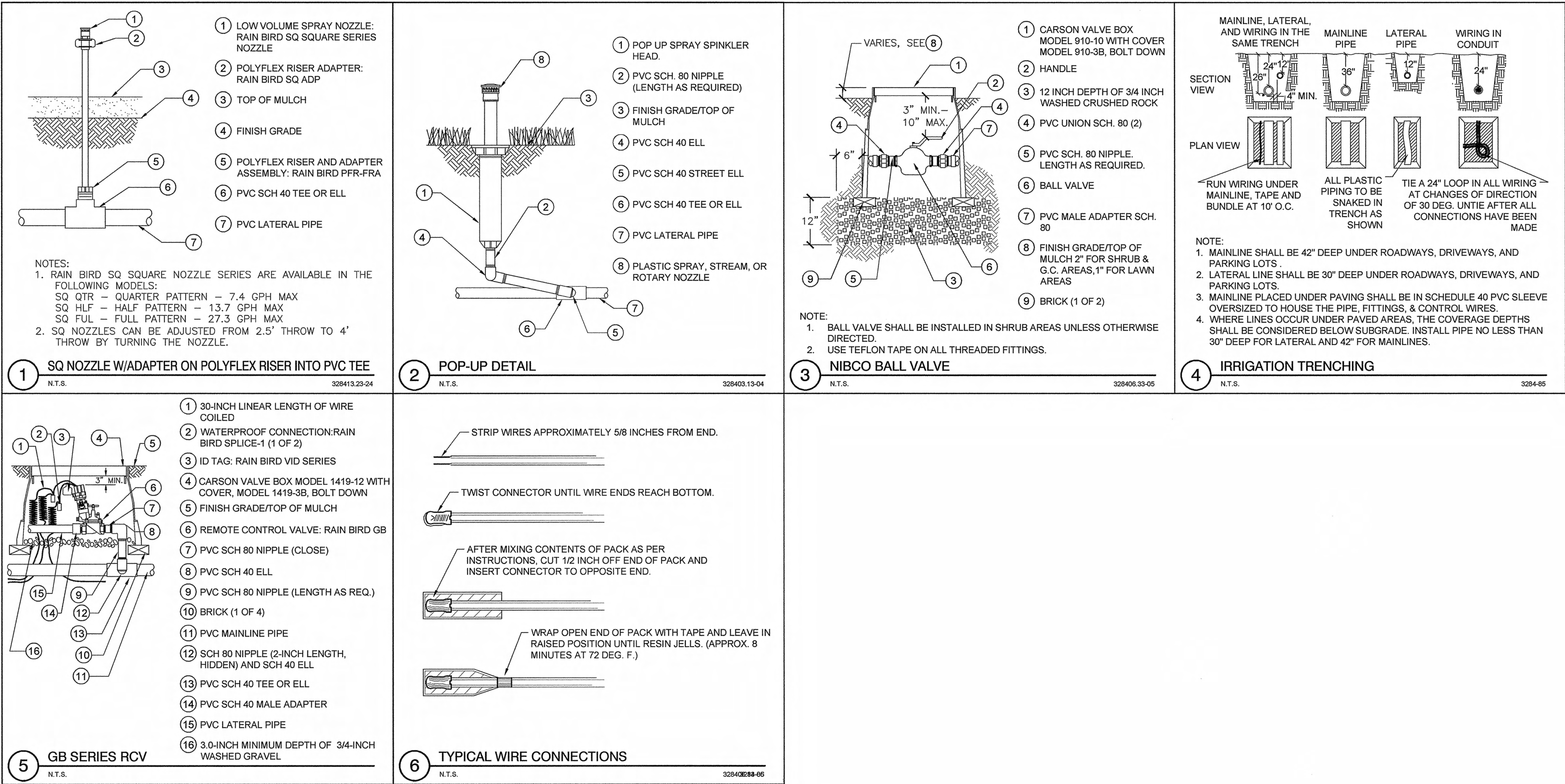
Toufic Jamil Semaan 4/13/2012
TOUFIC JAMIL SEMAAN
ACTING CITY ENGINEER
R.C.E. NO. 59226 (EXP. 06/30/2013)

SCALE: AS SHOWN

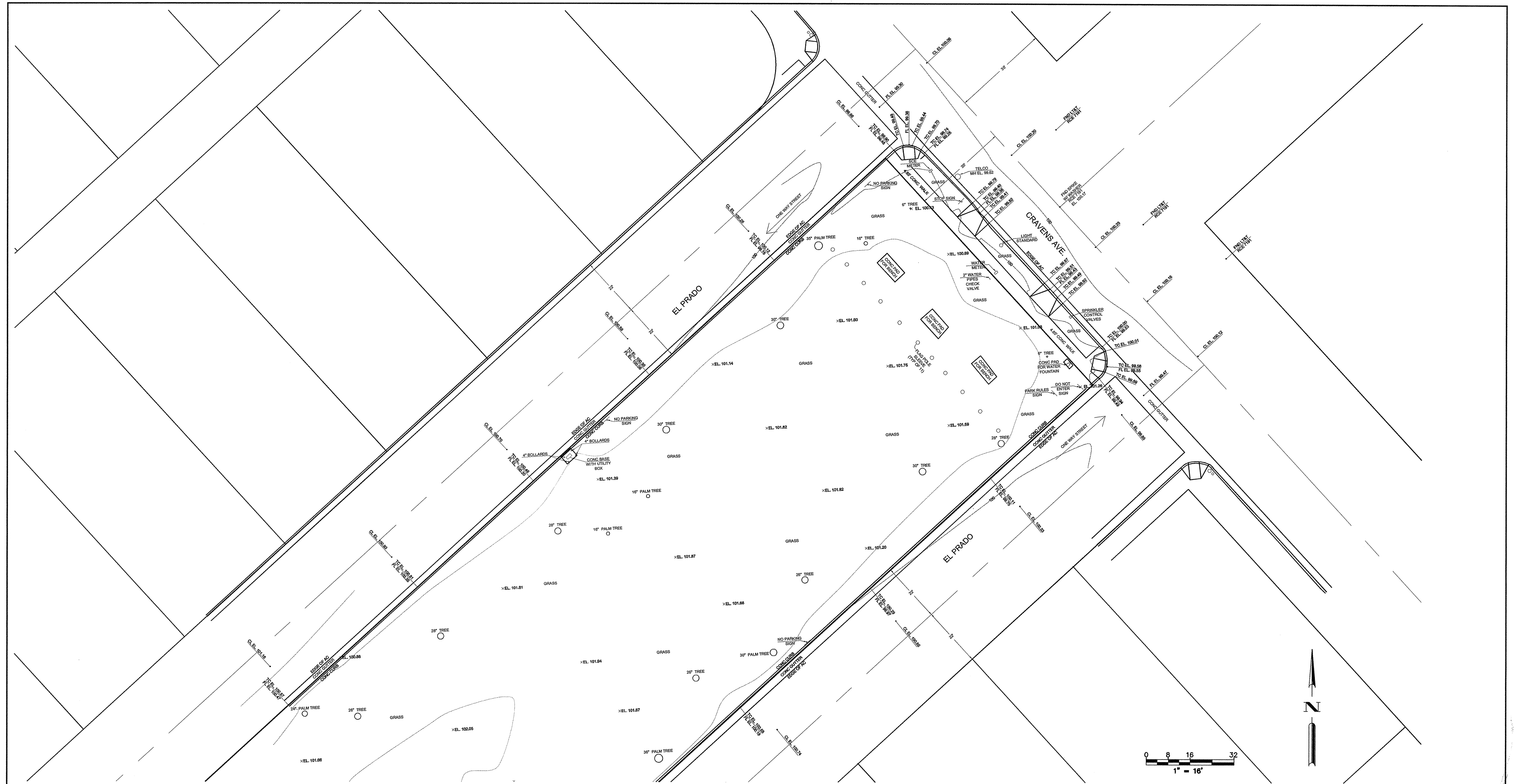
SHEET 6 OF 11

PLAN NO.

LS-71



BENCHMARK: ELEVATIONS AS SHOWN HEREON ARE IN TERMS OF THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) BASED LOCALLY UPON THE FOLLOWING COUNTY OF LOS ANGELES BENCHMARK(S): NAME: NGVD29 ELEV. (FT) CY 9522 118.84 CY 8324 118.02		BASIS OF COORDINATES: BEARINGS AND COORDINATES AS SHOWN HEREON ARE IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM OF 1983 (EPOCH 2000.35), ZONE 5; BASED LOCALLY UPON THE FOLLOWING STATE OF CALIFORNIA CORRS STATIONS: NAME: LATITUDE: LONGITUDE: CRHS 33-49-24.59403 118-16-21.90043 CRHS 33-49-24.59403 118-16-21.90043		PLANS PREPARED BY: 	RECOMMENDED BY: BETH OVERSTREET PROJECT MANAGER R.C.E. NO. 63944 (EXP. 09/30/2012)	DRAWN BY: STEPHANIE HARRIS DESIGNED BY: ARTHUR ALANIZ PROJECT ENGINEER: LEA REIS, ASSOCIATE ENGINEER	APPROVED BY: TOUFIC JAMIL SEMAAN ACTING CITY ENGINEER R.C.E. NO. 59226 (EXP. 06/30/2013)	SCALE: AS SHOWN SHEET 7 OF 11 PLAN NO. LS-71	
---	--	---	--	----------------------------	---	---	---	---	--



REVISIONS					
REV	DATE	BY	CHECKED	DESCRIPTION	

BENCHMARK:
ELEVATIONS AS SHOWN HEREON ARE IN TERMS OF THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) BASED LOCALLY UPON THE FOLLOWING COUNTY OF LOS ANGELES BENCHMARK(S):

NAME:	NGVD29	ELEV. (FT)
CY 9522		118.84
CY 8324		118.02

BASIS OF COORDINATES:
BEARINGS AND COORDINATES AS SHOWN HEREON ARE IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM OF 1983 (EPOCH 2000.35), ZONE 5; BASED LOCALLY UPON THE FOLLOWING STATE OF CALIFORNIA CORS STATIONS:

NAME	LATITUDE	LONGITUDE
CRHS	33-49-24.59403	118-16-21.90043
CRHS	33-49-24.59403	118-16-21.90043

PLANS PREPARED BY:

BEC Bolton Engineering Corp.
Civil Engineering and Surveying
25834 Narbonne Avenue Suite 201
Lomita, Ca. 90717
Ph: 310-326-5560 Fax: 310-326-5581

RECOMMENDED BY:

Beth Overstreet 4/13/12
BETH OVERSTREET
PROJECT MANAGER
R.C.E. NO. 63944 (EXP. 09/30/2012)

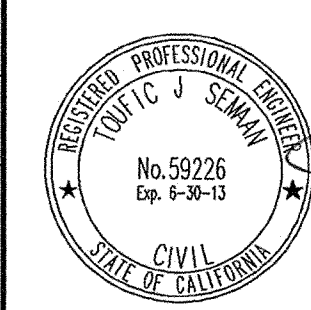
DRAWN BY: DJB
DESIGNED BY: DJB
PROJECT ENGINEER: LEA REIS, ASSOCIATE ENGINEER
DATE: 4/13/12

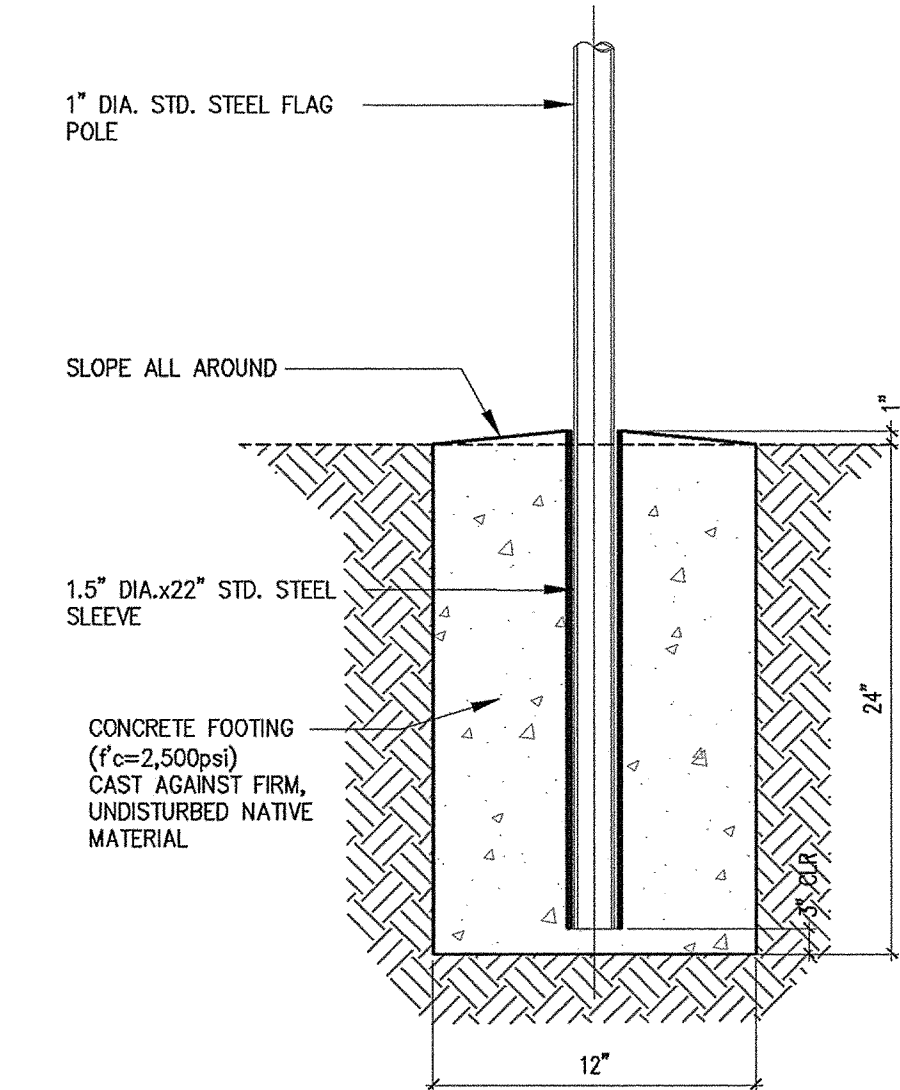
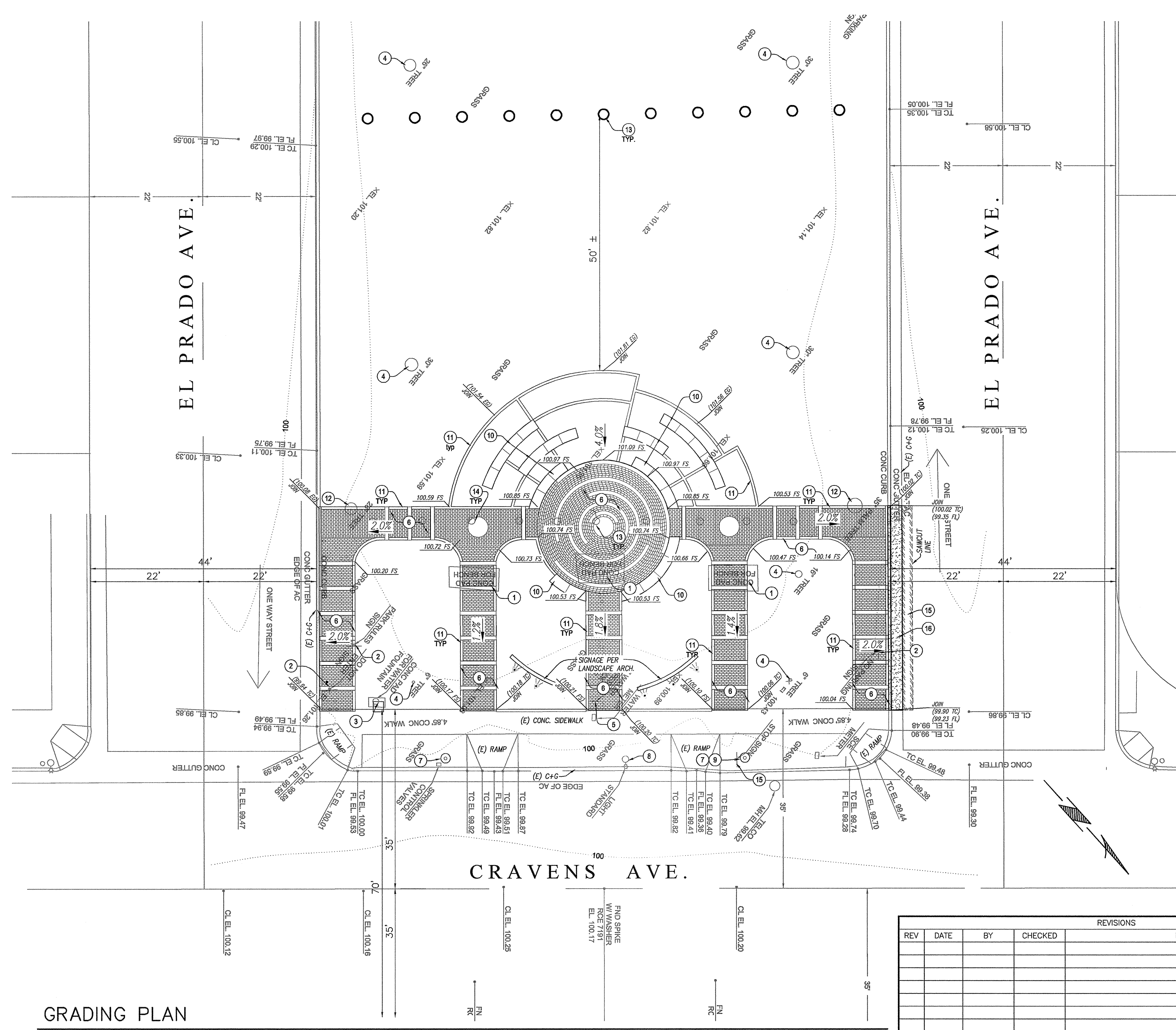
CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT
TORRANCE CENTENNIAL PLAZA, FEAP-739
PARTIAL TOPOGRAPHIC SURVEY

APPROVED BY:

Toufic Jamil Semaan 4/13/2012
TOUFIC JAMIL SEMAAN
ACTING CITY ENGINEER
R.C.E. NO. 59226 (EXP. 06/30/2013)

SCALE: AS SHOWN
SHEET 8 OF 11
PLAN NO. LS-71

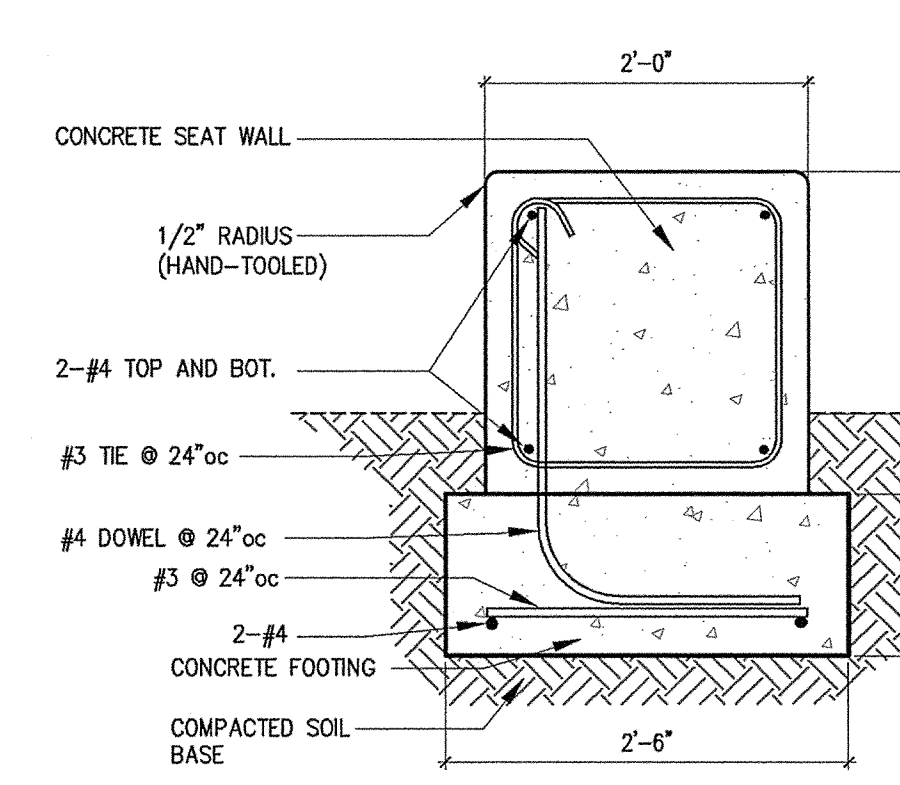




FLAGPOLE FOUNDATION DETAIL

SCALE: 1"=1'-0"

3
C2



SEAT WALL DETAIL

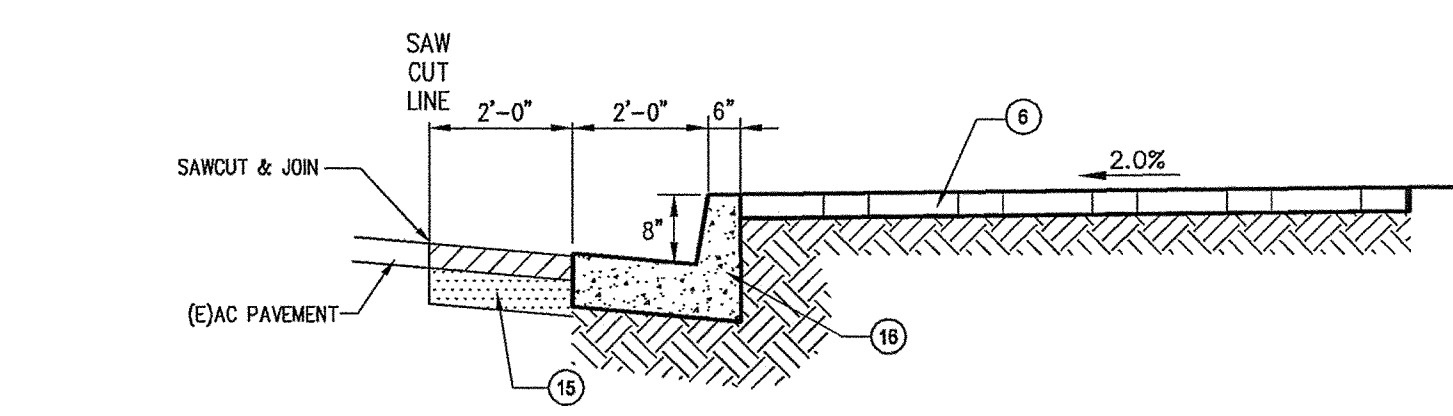
SCALE: 1"=1'-0"

1
C2

MOW CURB DETAIL

SCALE: 1"=1'-0"

2
C2



CURB AND GUTTER SECTION

SCALE: 1" = 2'

4
C2

GRADING PLAN

SCALE: 1"=10'

BENCHMARK:
ELEVATIONS AS SHOWN HEREON ARE IN TERMS OF THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) BASED LOCALLY UPON THE FOLLOWING COUNTY OF LOS ANGELES BENCHMARK(S):

NAME	NGVD29	ELEV. (FT)
CY 9522	118.84	
CY 8324	118.02	

BASIS OF COORDINATES:
BEARINGS AND COORDINATES AS SHOWN HEREON ARE IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM OF 1983 (EPOCH 2000.35), ZONE 5; BASED LOCALLY UPON THE FOLLOWING STATE OF CALIFORNIA CORS STATIONS:

NAME	LATITUDE	LONGITUDE
CRHS 33-49-24.59403	118-16-21.90043	
CRHS 33-49-24.59403	118-16-21.90043	

PLANS PREPARED BY:

Bolton Engineering Corp.
Civil Engineering and Surveying
25834 Narbonne Avenue Suite 201
Lomita, Ca. 90717
Ph: 310-325-5580 Fax: 310-325-5581

RECOMMENDED BY:

BETH OVERSTREET
PROJECT MANAGER
R.C.E. NO. 63944 (EXP. 09/30/2012)

DATE: 4/13/12

DRAWN BY: DJB

DESIGNED BY: DJB

PROJECT ENGINEER:
LEIF REIS, ASSOCIATE ENGINEER

DATE: 4/13/12

APPROVED BY:

TOUFIC JAMIL SEMAAN
ACTING CITY ENGINEER
R.C.E. NO. 59226 (EXP. 06/30/2013)

SCALE: AS SHOWN

SHEET 9 OF 11

PLAN NO. **LS-71**

-S-71

LS-71